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**Student learning in mini-enterprises**

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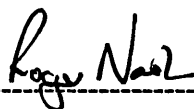
# STUDENT LEARNING IN MINI-ENTERPRISES

Submitted by Roger Nash  
for the degree of Ph.D  
of the University of Bath  
1992

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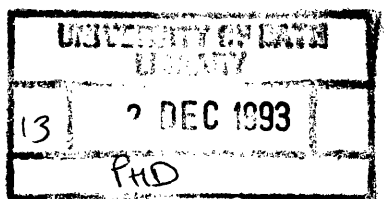
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**To my parents and Sue for their encouragement and support.**

## **ABSTRACT**

Although mini-enterprise has been a popular example of schools/industry initiatives during the past decade, there has been little research to determine their influence on student attitudes, or their educational value. The present study was therefore an attempt to ascertain the knowledge gained, the skills acquired and the attitudes developed by students participating in a mini-enterprise.

The research was conducted in three stages. During the first, enquires were made to establish a general perception of what knowledge, skills and attitudes were thought to be developed by students participating in a mini-enterprise. Using the data obtained, a detailed questionnaire was constructed which was designed to elicit the views of students before and after their participation in a mini-enterprise. In the second stage of the research, the questionnaire was given to 424 students, (including a control group of approximately 10%, who were not involved in a mini-enterprise) from twenty schools, in both urban and rural areas.

The 'experimental' and control groups were statistically compared for significant differences. The student responses indicated few differences between those students who had participated in a mini-enterprise and those who had not, although it did indicate that students had a fair understanding of economic and industrial issues.

The third phase of the of the research followed up the questionnaire with a series of semi-structured interviews which were conducted with over 100 students of different ages, from 10 schools, who had participated in a mini-enterprise. The data indicated that most students enjoyed the opportunity to manage their own learning, and that teachers noted a general improvement in student motivation during the mini-enterprise. Few students were able to relate their mini-enterprise activities to other subjects studied at school. However, their involvement did provide an opportunity for students to work on an equal basis with adults, and to develop a range of personal and social skills essential to the smooth operation of a commercial business.

## INTRODUCTION

During the past decade and a half, various government departments, business and education have begun to react to the growing concern about the performance of the UK economy, compared with its EC partners and its other international competitors. A number of possible causes for the poor performance of business have been identified, one of which is the inability of the education system to 'prepare' students in the primary and secondary phases of education for the world of work.

During this period, governments and industry have responded by introducing, and funding, a number of schools/industry initiatives which have focused specifically on encouraging students in statutory education to be more 'enterprising', and by fostering a better understanding of industry and commerce.

In the late 1970s the Royal Society of Arts Manufactures and Commerce (RSA) launched its 'Education for Capability' manifesto which highlighted the imbalance between education and training. It suggested that education concentrated too much on scholarship and not enough on developing practical skills and experiences which would have an application in industry.

*"They (young people) acquire knowledge of particular subjects but are not equipped to use the knowledge in ways which are relevant to the world outside the educational system. This imbalance is harmful to individuals, to industry and to society." (Francis, 1991 p.28)*

The government reacted in various ways, and Coffield (1990 pp.60-64) has identified twelve separate 'Enterprise initiatives' which have been introduced by government in an attempt to develop enterprise in young people. Several of these have been targeted at students in the primary and secondary phases of education. The Mini-Enterprise in Schools Project (MESP) focused on students aged between 5-17, attempting to provide them with the opportunity of running their own company. Another, the Technical and Vocational Educa-

tional Initiative (TVEI), was targeted specifically at students aged between 14 and 18, although it undoubtedly had an influence on the curriculum of all students in secondary schools. It was a direct attempt by government to redress the anti-industry sentiments thought to be present in the education system. (Gleeson 1987)

Two more initiatives attempted to influence teachers. One set the objective of involving 10% of teachers each year in an industrial placement to enable them to gain an appreciation of the needs of employers and the importance of links between schools and industry. The second, Enterprise Awareness in Teacher Education (EATE), was intended as a catalyst for the promotion of course and staff development, focusing initially on enterprise and economic and industrial awareness, within institutions of initial teacher education.

TVEI and MESP are not mutually exclusive. Both are attempts to influence the curriculum in schools. TVEI, introduced in 1983, was a significant attempt by the government to influence the secondary school curriculum, by encouraging schools to respond to the needs of industry. (McCulloch 1987) The initiative was funded and controlled directly by the government through the Manpower Services Commission (MSC). As part of the TVEI contract, schools were required to establish and deliver a number of specific objectives including, a minimum period of work experience for their students.

MESP was established in 1986, during Industry Year, to promote school based businesses which reflected real-life referents and were not necessarily based on large or medium sized private limited companies. (Jamieson et al. 1988a)

*"The original aim of the project was deceptively simple. It was to try and make sure that every secondary school in England and Wales undertook a mini-enterprise." (Jamieson et al. 1988b)*

In doing so it was promoting TVEI aim number 4, which stressed the importance of skills and knowledge which related to the real world. (Hitchcock 1988, p.3)

The project has a team of coordinators who provide materials and training for schools wishing to undertake a mini-enterprise. They are provided with written materials, the offer of a grant provided by a national bank and training and support through a network of coordinators. By 1988, the project estimated that 70% of secondary schools were running a mini-enterprise company. The companies take many forms (which will be discussed in detail later), but are known generically as mini-enterprises.

A second aim of the project was to develop the concept of 'Enterprise Education' in schools.

*"Enterprise education targets whole educational institutions, their structures and processes. It has at its centre the view that education is about creating an environment in which learners can find out more about themselves, and learn to become independent, creative and self-sustaining in the adult world." (Jamieson et al. 1988b)*

MESP was one of many organisations investing a massive amount of time, money and energy in promoting 'enterprise, such that Coffield suggests;

*"... enterprise is not just the latest fashion in Conservative thinking; rather a whole new world of enterprise has been brought into being and its influence is spreading in so many directions simultaneously that few people are likely to escape whether they are children in primary school, students in university, unemployed miners or redundant executives. The intention is nothing less than to change the culture of education, training and employment." (Coffield 1990 p.64)*

A number of TVEI projects have been evaluated (eg. Barnes et al. 1987) and MESP was evaluated in 1988.(Jamieson et al. 1988b) These evaluations point to the need to ensure students see the relevance of their work in school, to their activities outside school, and particularly to the demands they will face in the world of work.

Projects and activities which simulate the world of work are an important feature of secondary education today and mini-enterprise is arguably the most influential. As Jamieson et al suggest:

*"Of all the forms of work simulation examined ... it is mini-enterprises that have captured the imagination of schools and have grown most quickly." (Jamieson et al. 1988a)*

The aim of the present study therefore, is to investigate the effect participating in a mini-enterprise has on students.

The history of the so called, 'demise', of British industry would require a thesis in its own right. Therefore this study will begin by tracing the main features of the antecedents of recent concerns about British industry. It will review recent work on the 'new vocationalism', and learning theories which have been influential in schools/industry work. Creating a more enterprising work force is a central objective in government policy and the concept of enterprise, and the models of enterprise used in education will be reviewed. Much has been made of the need for education to be more sensitive to the needs of industry. It is however, not always clear what these needs are. The final section of the review of current literature examines some of the views expressed by prominent organisations and individuals on this topic.

The research focuses on the experience of students participating in mini-enterprise companies. A survey was conducted of industrialists, educationalists, and students who had an interest or experience of mini-enterprise to ascertain what knowledge, skills and attitudes they felt were promoted by such an activity in schools. This information was used to formulate a comprehensive questionnaire which related to the experiences of pupils participating in a mini-enterprise. Then, using the questionnaire, data was analysed which had been collected from 350 students, before and after their mini-enterprise experience. The questionnaire was also given to a control group of approximately 100 stu-

dents who were not involved in a mini-enterprise activity. Following this analysis, a series of semi-structured interviews were conducted with 100 students to provide an accurate picture of the nature of the mini-enterprise experience and the effect it has on students' knowledge of business, their work related skills, and their attitudes towards business and the world of work generally.

The final sections of this report relate the findings of the research, to current developments in the schools/industry field, which have been designed to encourage a more positive student attitude to the work of industry and commerce.



## CHAPTER 1

### **The Historical Background to Concerns of British Industry about the Influences on, and Development of, the Country's Education System**

*"All industrial societies are obliged to conduct their social, economic and political affairs on the basis of the competencies provided by an educational process and all find it necessary to review their educational provision in the light of changing technological and economic pressures. Having said that, there are considerable variations in the degree to which economic factors are allowed to determine the shape and content of the educational process - both between and within individual nation states." (Jamieson & Esland 1989, p.6)*

To trace the historical development of the relationship between education and industry in this country would require an in-depth study of social, political and economic factors during the past two centuries. Such a project is not the purpose of this study, but an examination of certain key issues, particularly attitudes towards the provision of education and the Conservative approach to entrepreneurial decisions, provides a useful backdrop to explain the present relationship between schools and industry.

The term 'Industry' is used in a variety of ways and its meaning has certainly changed during the past century. During the 19th century it was almost exclusively used to describe manufacturing industries and some people still use the word in this rather specific context today. (Lightfoot & Jamieson 1982, p.9) As manufacturing industries began to decline towards the end of the 19th century and the so called, service industries of banking, insurance and shipping began to be more prominent, so the definition of the word grew to encompass the new activities. Today the term has broadened even further and references to the entertainment and leisure industries are now common. To overcome possible confusion, the word 'business' is often substituted, as in the case of 'Education/Business Partnerships', to describe the broad range of industrial and commercial activities.

Reference will frequently be made to Britain and, 'this country', throughout this study. It is acknowledged that the education system and certain developments in industry were, and still are, different in various parts of the UK. However Britain will be used, except where sources make it possible for specific locations to be identified.

During the period 1820 to 1880, industry in this country was thriving and generally so successful that Britain was often described as 'the workshop of the world'. (Chambers 1961) However, there were those who had some concerns about the performance of British industry compared to foreign competition. Pevsner, in his history of architecture and design, caught the mood in the country after the Great Exhibition of 1851, which was intended at the time to be a celebration of the dominance of British industry.

*"The aesthetic quality of the products was abominable. Sensible visitors realised that, and soon discussions started in England and other countries as to the reasons for such an evident failure." (Pevsner 1960 p.41)*

Nevertheless, British industries did take nearly all the prizes at the 1851 exhibition, but the fact did not go unnoticed, that other countries, including Prussia, France and the United States, who were only just beginning to industrialise, were doing so in a highly effective and professional manner.

The decline was not restricted to the aesthetic quality of the products, labour productivity, growth and domestic investment also compared unfavourably with USA and Germany. (More 1989) Complacency, the lack of investment capital and an ineffective education system, were identified as causes of the apparent decline and the inability of industry in this country to compete with the foreign competition. (Hobsbawm 1968) Education was pivotal however, for without it, the factory owners would have a limited vision of potential developments and this would in turn effect their ability to make wise investment decisions. At another level, industrialisation required a more educated workforce

to produce and operate the new machines. On both counts there were concerns:

*"This situation was attributed by almost all experts to the extent and efficiency of secondary and technical education in those countries which contrasted very markedly with the parlous state of English secondary schools. An immediate result was a tendency to take education seriously as a national investment and, in particular, the Science and Art Department was founded (1853) to encourage, through advice and financial assistance, technical education, with particular emphasis on design and craftsmanship." (Wardle 1970 p.30)*

This pessimistic view fails to differentiate between the two levels of educational need, that of the owner/manager, and that of the worker. Sanderson (1983) suggested that, whilst literacy may have declined slightly in the period 1760 to 1830, male literacy was still at approximately 60% of the population (slightly higher in lowland Scotland) and this compared favourably with France where the figure was 50% in the late 18th century. (More 1989) As Britain had been a pioneer in the industrial revolution, 'on the job' training was well established through apprenticeship or other informal means. This provided an inexpensive and effective means of providing workers with the skills and knowledge they required.

*"British technical education has been heavily criticised, both at the time and by historians, but these technical criticisms need to be put into perspective. Low level technical education, complementing the existing system of apprenticeship, was probably as good as anywhere abroad." (More 1989 p.155)*

However, whilst the informal system of training may have provided an effective workforce for the traditional industries such as cotton and textiles, it also seems to have engendered a resistance to utilise opportunities presented by new technology. British managers with a largely practical education, could not grasp some of the scientific problems presented by the emerging industries and additionally, many of the factory owners lacked the necessary technical and scientific education to fully understand the economic and social implications of new manufacturing techniques. Although not directly related to for-

mal education, the lack of formal management training and the lack of experience of mass-production techniques may have also added to Britain's poor economic performance.

The perception at the time was that the economic situation could be improved by the provision of an education system which would provide for a more numerate and literate workforce capable of operating the machines which were becoming increasingly part of the industrial scene. The Education Act of 1870 was part of a movement towards compulsory schooling. W.E. Foster attempted to address the problem by suggesting:

*"There must be free education also for us, and that free education must not be confined to elementary schools. The illustration and example, so often quoted, of America would be quoted again, and we should be told that in the New England States education is free not only in elementary schools, but free also up to the very highest education of the State." (W.E. Foster 1870, cited in Maclure 1965 p.102)*

Prior to the 1870 Act, education provision was not consistent, the quality being dependant on location, individual schools and the attendance record of individual pupils. Foster wanted school boards to be established in areas where there were gaps in provision, but compulsory attendance was still to be subject to local bye-laws.

Unfortunately, the lack of scientific and managerial skills were perceived as part of a more pervasive problem, 'an entrenched cultural syndrome which pervaded 'educated opinion'. (Weiner 1981) This was embodied in a 19th century public school and Oxbridge disdain for industry and commerce. Noel Annan expressed the sentiment as follows:

*"One common assumption shared by most English men of letters in this century was that the career of moneymaking, industry, business, profits or efficiency is a despicable life in which no sane and enlightened person should be engaged." (Annan, cited in Weiner 1981)*

Weiner (1980) presents a picture of an upwardly-mobile middle class during the 1850 - 1900 period, trying to shed a 'stigma' of earned rather than inherited wealth. Many of the nouveau riche moved to large country residences where they were able to ensure a physical separation from their manufacturing plants and their cultural roots. Consequently, successful inventors and entrepreneurs tended to emulate the practices of the landed gentry and their younger sons would go into the Church or the armed services, but not into industry. (More 1989 p.78)

The Paris exhibition (1889) confirmed the continuing decline of British industries and the rapid progress of foreign competitors. The products from USA, France and Germany were perceived as superior in design and quality of manufacture, a fact which was largely attributed to the efficient use of machines and the workforce.

Numerous enquiries were conducted during the latter part of the 19th century to examine the state of English education thought to be a prime cause of the decline:

**The Newcastle Report (1861)** was established to enquire into the state of Popular Education in England and consider what measures, if any, were required to extend sound and cheap elementary education to all classes of people.

**The Clarendon Report (1864)** looked at the provision in Public Schools. One of its conclusions was that, the classical languages and literature should continue to hold the principal place in the course of study, but advocated that every boy should be taught mathematics, one modern language and some natural science.

**The Taunton Commission (1868)**, was set up as a direct result of the two previous commissions into public schools and elementary education.

The reports highlighted a number of perceived deficiencies in English education when compared to our industrial competitors. These included the general availability, the quality of teaching, funding, the lack of government regulation and the restricted curriculum offered. Interestingly, several investigations, notably the **Taunton (1868)**, **Samuelson (1882-4)**, **Cross (1888)** and **Bryce (1895)** commissions, looked to Prussia (which became Germany in 1870) for guidance, inspiration and reassurance, a course of action which was to be repeated in the 1980s. The Samuelson report was able to report:

*"Great has been the progress of foreign countries, and keen as is their rivalry with us in many important branches, we have no hesitation in stating our conviction, which we believe to be shared by Continental manufacturers as a whole, our people still maintain their position at the head of the industrial world." (Samuelson Report Vol. 1 - cited in Maclure 1965 p. 122)*

Although somewhat complacent, the report went on to warn that education in certain countries was superior.

*"... first as regards the systematic instruction in drawing given to adult artisans ... and secondly, as to the general diffusion of elementary education." (Samuelson Report Vol. 1 - cited in Maclure 1965 p. 122)*

At this point in the development of the educational system, there seemed to be an assumption, that the lack of an appropriate education system was one of the major causes of the country's lack of competitiveness in world markets. Without doubt, comparisons between the educational system in this country and those developing in some other countries, clearly indicated certain shortcomings. What was not so clearly demonstrated however, was that the shortcoming in the education system were responsible for the failing in British industry. The focus seemed to be wholly on those in the workforce rather than the government and those who owned and managed the companies.

It was therefore, not surprising that the curriculum during this period reflected and maintained the status quo. In elementary schools, pupils were typically taught how to read and write and 'the habits of cleanliness, subordination and order'. (Wardle 1970) By 1867 there had been little 'curriculum development' and the reason for this is well illustrated by Robert Lowe's, (author of the Revised Code of 1862), comments published in a pamphlet of that year:

*"The lower classes ought to be educated to discharge the duties cast upon them . They should also be educated that they may appreciate and defer to a higher cultivation when they meet it, and the higher classes ought to be educated in a very different manner in order that they may exhibit to the lower classes, that higher education to which, if it were shown to them they would bow down and defer." ( Lowe - cited in Wardle 1970 p.25)*

Towards the end of the century, the curriculum offered in some elementary schools began to broaden to include drawing, manual work (metalwork and woodwork), practical cookery and demonstrations, at least, of scientific experiments. The emphasis however was still on the three 'Rs', and if economies were required, the additional and arguably more relevant subjects, were liable to be cut. Further more, the expanded curriculum was only possible in the larger board schools, as the smaller ones could not afford the expense of employing the specialists even if they were available.

Gradually the 1870 Education Act started to improve the standard of pupils' work and the government was obliged to increase the six standards specified in the Revised Code to seven. (1880) The numbers of students staying longer at school rose leading to the creation of higher grade schools where there were some interesting experiments with a vocational type curriculum. (Wardle 1970)

During the period 1850-1900, the curriculum of the public schools attended by the offspring of landed gentry, and increasingly during the period, the industrial middle class, remained virtually unchanged, with the Classics, Euclid and

English Literature being the dominant components. Despite the growing concern of successive educational commissions, science had great difficulty establishing itself. Some historians argue (More 1989) that public schools set out to indoctrinate the sons of the risen middle classes to ensure that they inculcated aristocratic values, one of which was not to be seen to be trying too hard, to be one of the leisured class. (Hobsbawm 1968 p.183) This conservatism and lack of enterprise compared with the industrial leaders in USA and Germany, combined with the lack of scientific and technical education opportunities for large sections of the population, certainly contributed to the industrial decline towards the end of the 19th century. The landed gentry and the church, who valued the classical form of education, held the positions of power and could delay the development of popular education in the country. The adoption of the values of the landed gentry by the British industrialists distinguished them from the American industrialists who had developed a built in urge to maintain a constant rate of technical progress for its own sake. (Hobsbawm 1968 p.183)

*"Their influence (those people with inherited wealth) was such that they managed successfully to insulate schools from direct association with the new industrial order." (Perkin - cited in Jamieson 1990)*

Thus, the apparent inertia within the educational system was perhaps more to do with the prevailing mores of the 'ruling class' and their political representatives, than it was to do with any recognition of educational or commercial needs.

Another reason suggested for the decline of manufacturing industry during the latter part of the 19th century (which still seems to be prevalent today) was the high cost and high risk, of investment required to exploit the newly emerging technology. The potential profits were high, typically around 15% on investment (in 1900) when compared with the return on Government stock which



was approximately 3%. (More 1989) Given the stark choice there seemed little reason not to invest in industry. However, the situation was complicated by the practice in this country of investing in equities, which did not always pay out dividends which reflected the underlying assets of companies. The equity market was at this time relatively small and unreliable, which made investment in government stock and rail bonds a safer investment for a group which, was conservative by nature. Therefore, during a period when the USA and Germany were investing heavily in manufacturing industry, there was a reluctance to modernise in this country. As Hobsbawm suggests:

*"... to change from an old and obsolescent pattern to a new one was both expensive and difficult. It was expensive because it involved the scrapping of old investments still capable of yielding good profits, and new investments of even greater initial cost; for as a general rule newer technology is more expensive technology." (Hobsbawm 1968)*

From 1870, the flow of capital into foreign investments exceeded the investment in this country and during the great boom (1911-13) twice as much was invested abroad as was invested at home. This was far from adequate for the modernisation necessary in British industries to prevent them running down. (Hobsbawm 1968 p.192)

However, attempts were made to improve the quality of educational provision, and the **Revised Code of 1862**, linked schools funding to attendance and the pupils' ability to reach certain standards in the three 'Rs'. The results were generally considered a disaster, for whilst there was an improvement in the regularity of attendance and a marginal improvement in the teaching of the three 'Rs', the code had the effect of narrowing the curriculum offered. (Wardle 1970)

The Revised Code, for all its many faults, did highlight the need for a more co-ordinated approach to elementary education.

*"The revised code established value for money as the criterion for measuring the educational system, and it stood condemned under its own terms. It may well be that public opinion was prepared for a substantial measure of state intervention in 1870 ... by the demonstration of the complete inability of private enterprise to solve the problem."*  
(Wardle 1970)

The notion of an education system being able to demonstrate 'value added' seems to well established at this time, and once again the link between education and the economic and industrial decline seems to have been made, when in fact there was limited evidence to support the relationship between one and the other.

**The 1902 Education Act** established Local Education Authorities (LEAs) and charged them to:

*"... consider the needs of their area and take such steps as seems to them desirable, to supply or aid the supply of education other than elementary, and to promote the general coordination of all forms of education."* ( 1902 Education Act - cited in Maclure 1965 p.149)

From this point on, the government took a more positive role in developing educational policy, something which had previously been left to individual school boards. The 1902 Education Act had a liberalising effect on the curriculum in some schools, giving teachers a licence to experiment, although the entrenched tradition of the Revised Code prevented any rapid development.

In 1904, Robert Morant issued Regulations for Secondary Schools which established the pattern of education which was to continue until after the Second World War. He had clear views about the nature and purpose of different types of school within the newly established system. He had no objection to pupils transferring from elementary schools to secondary schools as long as they adopted the mores of the middle class.

*"He took the same view of transfer as the army took of commissioning a man from the ranks. That is to say that a working-class child who entered a grammar school was ex-*

*pected to take on the ethos of the middle-class institution; he became, ex officio, a member of the middle class." (Wardle 1970 p.73)*

Therefore, whilst Morant supported the liberalising of the elementary school curriculum, he opposed the development of the higher grade schools which were taking the first steps in the development of a vocationally orientated curriculum.

It could be argued, that he, like his predecessors, saw the workforce as being the main cause of Britain's economic and industrial failing, rather than the owners or managers. The notion of a well trained and disciplined workforce, perhaps reflecting the situation in the armed services, might have been a useful model for industrial development, had the leaders been blessed with a relevant education and the vision to identify areas for product and personnel development.

The first World War (1914-18) delayed further development of elementary schools as new building ceased, many existing school buildings were used as hospitals or barracks and teachers were called up for military service. Nevertheless, it did focus attention on the need for public services and generated a desire to 'create a land fit for heroes to live in'.

**The Lewis Report (1916/17)** was established to consider what steps were necessary to make provision for the education and instruction of children and young people after the war. It looked specifically at training for employment. It identified the need for education beyond 14 and 15 and suggested that this should take the form of Continuation Classes.

*"There are, of course, no substitutes for a sound early education, but such an education when it terminates at 14, or even 15, leaves the child with intellect and character still uninformed at perhaps the most critical stage of his development.... Between 16 and 18 a greater amount of specialisation will probably be introduced ... English teaching should now tend towards a deliberate stimulation of a sense of citizenship. For young persons engaged upon highly skilled work, however, technical subjects bearing upon that work*

*will inevitably come to take a leading place in the curriculum, although even for them the civics and humanities must be by no means excluded." (The Lewis Report - cited in Maclure 1965)*

There was in the report a recognition of the need for vocational training, but not without, civics and elements of the humanities.

The cost of the war was considerable both in human and financial terms and on two occasions, 1921 and 1931, education was subject to severe cut backs as part of national economies. Despite the financial restrictions, attempts at educational reform continued. In 1926, the **Hadow Report** considered the organisation of schools and the curriculum offered to pupils who remained at school up to the age of 15 in other than secondary schools. The report recommended that the minimum leaving age should be 15 for all pupils and that there should be secondary education for all children that followed on six years of primary education. It suggested therefore that there should be an alternative to the academic course provided by grammar schools where the curriculum might have a 'practical' and 'realistic' basis. As a result of the report, by 1934 half of all elementary school children over eleven years of age attended reorganised schools and by 1938 this figure has risen to two thirds. This reorganisation failed to break down the distinction between the elementary and secondary schools that Morant had introduced and the provision of different types of education suited to the needs of different social classes continued, irrespective of the needs of either the country as a whole, industry or the individual.

*"The argument lay between those who thought of secondary schools as being quite distinct from the elementary schools and as essentially middle class institutions, and those who followed R. H. Tawney in arguing that elementary and secondary education should be 'end-on' stages in the same process." (Wardle 1970 p.77)*

During the period 1900 to 1938, the elementary schools became more effective. Many of the social problems caused by disease and malnutrition were being addressed, and severely handicapped children were taught in special

schools. As the standard improved, so the schools became more attractive to middle class parents who had in the past sent their children to private schools. For them, this not only provided elementary education at low cost but also provided the opportunity of a scholarship to grammar schools with a sliding scale of charges.

**In 1938 the Spens Report** considered the organisation of secondary education for pupils aged 11-16. The report recommended the establishment of a tripartite system providing separate grammar, technical and modern schools.

*"It advocated the introduction of courses based on pupils' vocational interests in the later stages of the school life, urged the adoption of a 'tutorial system' and the appointment of careers masters." (Maclure p.193)*

It also advocated parity of staffing and staff treatment, a radical proposition given the previous views on secondary education provision. Spens spelt out the malaise of the English educational system as follows:

*"On a dispassionate retrospect of the history of post-primary education since 1900 we cannot but deplore the fact that the Board did little or nothing ... to foster the development of secondary schools of quasi-vocational type designed to meet the needs of boys and girls who desired to enter industry and commerce at the age of 16.*

*The need of a highly industrialised society for post-primary schools of non-academic type with an orientation towards commerce or industry was shown by the development of the Junior Technical Schools from 1913 onwards.*

*The present difficulties in this field of secondary education have arisen largely out of the confusion which began about 1904 between a type of secondary education appropriate to the needs of boys and girls between the ages of 11 to 12 and of 16 to 17 and the traditional academic course orientated towards universities." (Spens Report 1938 pp.71-3)*

**In 1943 the Norwood Report** restated the view that secondary education should provide schools to cater for pupils with different interests and aptitudes. The report suggested that some pupils were essentially practical, preferring to work with the concrete, developing skills required to become an engineer or craftsman. Other pupils preferred to work with ideas and they

would need a curriculum which would, no doubt, prepare them for university and the professions.

In some ways, the Spens and Norwood reports marked a significant step forward in educational thinking in that they identified a need for a broad educational experience for young people, with opportunities to move into specific types of education or training for young people with identifiable ability or competence in certain areas. However, they were perhaps somewhat misguided in that they separated practical activities from the development of ideas, when engineers, often considered to be the 'engines' of industry, needed to develop both.

The need for vocational and technical education was being voiced in all major educational reports leading up to the Education Act of 1944. Unfortunately, the underlying faith in the superiority of the 'public school' type curriculum was not seriously challenged. This could be because most of the reports were prepared by past students of public schools. There was no serious consideration given to the notion that **all** pupils should be entitled to some form of practical, or vocational education. Even if there was, it certainly did not translate into either legislation or practice. There was great faith in psychological tests to establish the best form of education for individual students and a system of flexible transfer to accommodate those misplaced. Professional psychologists expressed concern about the uncritical acceptance of using standardized mental tests on such a massive scale for educational selection. The transfer of students once selected was minimal both because of the administrative inconvenience and because of the different curriculum pursued in the different types of school. What was perhaps more serious with the value of hindsight, was the inflexibility of the thinking behind an elitist educational policy. This no doubt stemmed from the traditions of a public school education, which failed to realise that many students could be both practically and intellectually capable

as, fortunately, many of the Victorian inventors and businessmen demonstrated.

During the eighty years prior to the second world war, the national educational system developed slowly to the point where primary and secondary education was available for all. Throughout the period, private education continued providing largely a 'classical' education for the children of the upper, and latterly, the middle classes. State secondary education tended to emulate the curriculum of the public schools, such as Eton, and thus two separate traditions were established. Stated simplistically, one catered for the needs of the working class children who would work in the factories and on farms. The other would provide an education suited to the needs of those who would become managers or join the professions. Unfortunately neither attempted to address the more specific needs of the ailing manufacturing industries in this country. Neither did they attempt to address the underlying mistrust of business as stated by Bryant:

*"We may have become a nation of businessmen, but we are businessmen in spite of ourselves. We do not like or respect a man merely because he wears black and grey trousering and sits at a desk all day. What we really like and admire about him is what he does when he gets away from his desk." (Bryant - quoted in Weiner 1981 p.140)*

Thus, despite an acknowledgement of the need to change our educational views by some, there still remained a complacency about the strength of British industry and powerful incentives for bright aspiring students to bias their education towards a classical notion of education and away from the scientific and technical education identified as being an appropriate preparation for the world of industry and commerce.

There was still little appreciation of the need for young people to develop a range of general competencies and a flexible attitude towards their work. Industrial organisation still appeared to have been based on aspects of social

class, with academic or cerebral activity being ascribed high status, with the more practical activities viewed as less important.

Whilst comparisons with foreign competitors were regularly made, the problems identified within British industry seemed to have been rationalised and change to educational practice, was minimal. There appeared to be a somewhat complacent attitude to the progress being made by foreign businesses, and a rather simplistic view that education alone, was the root cause of this country's problems. What was lacking perhaps, was a recognition that at best, education could only tackle general competencies and help to promote certain social skills which would enable young people to respond more positively when they were in the workplace. Inevitably, the technological and scientific skills, however regularly updated within the school curriculum, would always lag behind the specific developments being used in industry.

After the Second World War, there was a massive development of secondary education and pupil numbers rose by 24% between 1950 and 1966. There were also developments in the organisational structure marked by the appearance of the Comprehensive School which reflected an egalitarian, rather than an elitist approach to education in that students of all abilities transferred to the same school at the age of 11. There were also changes in the curriculum and examinations offered. (Tomlinson 1991)

The concern about the decline of the industrial performance of this country relative to the USA, Germany and France did not diminish and attention became more directly focused on education as being one way of improving the situation.

**In 1959 the Crowther Report** was established to consider the education of boys and girls aged 15-18. The report recommended that the school leaving age be raised, and that attempts be made to encourage more young people



to remain at school until they were 17. It was against introducing a national exam below GCE 'O' level standard, but considered that this exam could be made available to a wider cohort of pupils.

**In 1963 the Newsom Report** recommended that:

*"...the school leaving age be raised to 16 for all pupils.*

*All schools should provide a choice of programme, including a range of courses broadly related to occupational interests for pupils in the fourth and fifth years of a five year course, and should be equipped to do so.*

*The school programme in the final year ought to be deliberately outgoing - an initiation into the world of work and of leisure." (Newsom Report 1963 p.xvii)*

It also recommended a break from the traditional view of an academic biased curriculum for the able and a practically biased one for other pupils, to a curriculum which offered equal opportunities for all pupils, suggesting:

*"... we are not indulging in the fallacy of supposing that there are two types of pupil, the able and 'academic', and the less able and 'practical'; but we do strongly believe that many, though not all, of our average and less than average pupils may find through practical activities a sense of achievement which can energise the rest of their work." (Newsom Report 1963 p. 128)*

The report entitled, *Half Our Future*, recognised some of the more general needs of industry which had, hitherto, been overlooked, specifically, the need for a highly motivated, highly skilled work force and the vital role education had in the process of preparing young people for the world of work.

During the post war period (1944) there was a rapid growth in world trade which in turn led to a measure of prosperity in Britain. Despite this, manufacturers in Britain were finding it increasingly difficult to export to traditional markets due to increase competition from Japan, the USA and Europe and manufacturing industry suffered declines in its world market share throughout the period 1955-1985. (More 1989) To make matters worse, the pound suffered a

series of crises during the late 1940s until 1966-7, and in the 1970s, the oil exporting nations, OPEC, precipitated a recession by raising the price of oil nearly 400% in a two year period. The continuing decline of British industry once again focused the attention of politicians on the relationship between education and industry and how, it could be improved.

On October 18th 1976, James Callaghan made a speech at Ruskin College

The speech was not hostile to the education system, but it did outline a number of major concerns:

- that educational standards were falling, or at least were not high enough
- that students leaving school at 16 lacked the basic education to undertake the task(s) required of them
- that there was an anti-industrial spirit, particularly amongst the most able students
- that students were ill equipped technologically for life in a society dominated by new technologies
- that students were not developing those qualities that equip them for making a living (Pring 1987 pp. 35-36)

The issues were not new, but the location chosen to make the speech, ensured that it would be put before the country through the mass media, in a way which had not been possible before. Once again, it made the case for a more vocationally orientated curriculum which was related to the needs of industry, as well as to the needs of the individual.

The speech initiated debate about education, (often referred to as the 'Great Debate') and a number of reports from various perspectives addressing the state of the relationship between industry and education, and two major issues predominated all the findings:

*"... the main source of many of industry's problems is the unfavourable attitudes held towards it by large sections of the population. Two consequences are said to derive from this: too few of the ablest young people choose a career in industry, and the workforce itself is apathetic or uncooperative or even hostile. The second is that since a key problem is one of attitudes, then education must have an important role in correcting the distortion." (Jamieson & Lightfoot 1982)*

The first issue identified was hardly a great surprise given the lack of status traditionally attributed to those working in industry. The second issue was a significant step forward, in that it identified one possible mechanism for addressing the root cause of this country's on-going problem.

A number of initiatives were already under development prior to the Ruskin College speech. The Schools Council Industry Project had been under discussion between the Council, the TUC and the CBI for some eighteen months. Several bodies including, Understanding British Industry (UBI), the Standing Conference on School Science and Technology (SCSST), Project Trident and a new section of the Industrial Society were established prior to Prime Minister Callaghan's intervention, as the result of an underlying concern for the perceived malaise of British Industry.

How the curriculum could be changed to address the points made during the 'Great Debate' was not clear, as there was not even agreement between the employers as to what preparation pupils required before entering employment. Further more, there were those in education who, as Pring describes, wished to disconnect education from economic and industrial needs and who felt:

*"... that education was of intrinsic worth and whose aims derived, not from an analysis of adult needs or work related skills, but from the academic traditions through which children could be put in touch with the 'very best that had been thought and said'. " (Pring 1987, p. 133)*

Unfortunately, the 'very best' was not always accessible to students who failed to see the relevance of the work to their future, but the sirens of the traditional

classical curriculum were a powerful disincentive for curriculum development. As Jamieson and Esland point out:

*"A grammar school child educated in the late 1940s would have found the curriculum little changed in a comprehensive school 20 years later." (Jamieson & Esland 1989, p.8)*

Even the exam boards, who saw themselves perhaps as guardians of traditional standards, were resistant to change. Although changes in examinations at 16 were made by the introduction of CSE in 1965, which aimed to provide and extend opportunities to pupils for whom the GCE examination was considered too difficult. The exam was always viewed with suspicion from its inception until it was replaced by GCSE in the 1980s. Changes to the examinations offered post 16, proved even more difficult, as 'A' levels were seen as the key to higher education and the examination boards and the universities seemed reluctant to introduce changes which might affect standards in any way.

The nature of the industrial base of the economy, in this country, post 1944 had changed. Many unskilled jobs had been lost, craft based industries being replaced by technician based industries. The manufacturing industries were declining and being replaced by service industries such as banking and insurance. More important perhaps, was that the speed of change meant that the notion of a 'job for life' embodied in the apprenticeship schemes became an inappropriate model.

*"Furthermore, there is overwhelming evidence to suggest that Britain does not have a highly skilled labour force that would be capable of supporting a high tech/high value added manufacturing industry. (Keep & Mayhew 1988, cited in Jamieson 1990 p.17)*

Students could expect several job changes in their working lives, periods of employment and, unemployment. (Handy 1984, cited in Crompton 1987 p.6)  
This set education the task of equipping students with a range of transferable

work, social and life skills which would enable them to cope with transitions in their working life. (Jamieson 1990, p.29)

During the 1980s, some of the larger companies started to articulate more specific objectives for education.

*"Some of the larger national organisations ..... have supported a radical revision of the school curriculum to embrace more experiential learning, a greater emphasis on economic literacy, and a more imaginative and relevant assessment system." (Marsden 1983)*

However, despite the growing support for the aims of the Schools/Industry movement, governmental interest seemed to be somewhat dependant on the state of the country's economy. As Jamieson suggests:

*"... in times of economic depression the schools-industry movement takes on a new lease of life and that the demands to make the content of education more congruent with the needs of business grow stronger." (Jamieson 1985 p.3)*

He questioned whether the latest attempt to change education, to establish schools/industry links, would be any more successful than the previous attempts detailed above. Certainly, the growth of a number of initiatives, such as the Schools Council Industry Project (SCIP) (1977 - present day) and Young Enterprise (1963 - present day), suggest that the present alliance will be more successful.

One reason for this might be the creation by the Local Education Authorities of School Industry Liaison Officers (SILOs) who have the task of bringing schools and industry closer together. As with most initiatives, the introduction of SILOs was slow but the Schools Council Industry Project's decision to use them during the 1980s as agents of change in schools, helped to create a support network throughout the country. Financial backing for this educational development came, unusually, from the Department of Trade and Industry. The SILOs role was to:

*"... act as a focal point for schools-industry work in a Local Education Authority. They are the major brokers and disseminators of innovation in the schools-industry movement. They are a point of reference for industrialists and trade unionists who often find it initially quite difficult to deal with large numbers of local schools. The SILO also deals with the large number of educational projects and organisations in this field which have something to sell to schools." (Jamieson 1985 pp. 10-11)*

From their initial concern with national projects, the SILOs started to establish local initiatives which included the use of Young Enterprise and mini-enterprise in schools, work experience and teacher placements in local industries, which will be described in detail later.

The success of the SILO network was largely due to its stress on local economic life, which made schools/industry projects more accessible to students and staff. It reinforced the importance of people, as agents of change, rather than books and other publications which tend to date quickly and consequently lose their credibility. Despite the development of the Schools/Industry interface created by SILOs there was little progress by schools to create a curriculum with an industrial dimension.

Frustrated by the slow progress of the Department of Education and Science's (DES) move towards a more industrially orientated curriculum, the Conservative government of Mrs. Thatcher introduced the Technical and Vocational Education Initiative (TVEI) in November 1982. David Young, the chairman of the Manpower Services Commission (MSC), stressed his determination to:

*"... ensure that schools should provide a broad preparation for the world of work or more specific vocational courses, suggesting that if they failed to respond to the MSC's lead he might 'as a last resort' use the powers available under 1973 Employment and Training Act to create technical schools run by the MSC itself." (Education 19 Nov. 1982 reported in McCulloch 1987)*

From an initial four year pilot involving 14 Local Education Authorities the scheme has now grown through an extension project, to involve most, if not

all 14 -18 secondary schools and colleges and has influenced the curriculum of 14 - 18 year old students in state education, either directly by enhancing the provision of technology and information technology facilities, or indirectly through the development of different teaching styles and teaching students to 'learn how to learn'. (Harland 1987 p.45; Senker 1990, p. 128; Hitchcock 1988, p.2)

At the beginning of the initiative, Lord Young placed great stress on the vocational aspect, stressing the view expressed within the Conservative Party at the time, that something had to be done to try and reduce unemployment and improve the country's economic performance.

*"The TVEI's political context gave it an emphasis on notions of nationalism, materialism, capitalism and enterprise consistent with the Conservative tradition but differing from the outlook of Bryce, Spens and Crowther. These reports had evoked what might be characterized as a 'liberal' approach to technical education. Bryce asserted a broad approach to secondary education that would embrace both 'liberal culture' and 'practical art'. Spens recommended the further development of junior technical schools as 'a type of secondary school providing a liberal education based on a more realistic and scientific curriculum than that of the grammar school'. Crowther's 'Alternative Road' was marked not by 'narrow vocational interest' but by a 'broad scientific curiosity'."(McCulloch 1987 p.23)*

There were a number of novel features of TVEI. Perhaps the most significant was that Local Education Authorities had to make a contractual commitment with the MSC, (rather than the Department of Education and Science), to meet the projects stated objectives. (Finegold & Soskice, 1988)

The contracts made between the MSC and the LEAs, were negotiated locally to reflect the needs of local industries and the educational resources available. As TVEI spread throughout the country it developed the concept of 'entitlement', a form of contractual right to certain aspects of the curriculum, (notably science, technology, information technology (IT), equal opportunities, careers

guidance and some form of work experience), something which was later to become a feature of the National Curriculum.

*"... it is now often suggested that the aim of TVEI (E) as applied to 14-16 year olds is to provide a 'technological dimension' in the delivery of the National Curriculum leading to GCSE." (Senker 1990 p.126)*

Like the Schools Council Industry Project (later renamed School Curriculum Industry Project, and the School Curriculum Industry Partnership), TVEI emphasised educational processes, such as problem solving, in addition to certain aspects of curriculum content which related to industry and the world of work. During its earlier phase, there were many who saw it as vocational education for the less able and as such, considered it to be incompatible with the principles of comprehensive education. (Hargreaves, D., in Times Educational Supplement, Nov. 2nd. 1984) Given the previous history of the Schools/Industry movement, there were some who considered the doubters' concern to be misplaced. Many educationalists consider the initiative has provided a boost for science and technology in the secondary schools, and has focused attention on aspects of careers guidance in secondary schools. As Jamieson et al. reported:

*"This programme is gradually bringing about some of the most important curriculum changes for students between the ages of 14 - 18 since the 1944 Education Act." ... It should be seen as the most effective attempt in recent years to introduce a more vocationally orientated curriculum to the upper years of secondary school, alongside a pedagogy that emphasises active learning techniques." (Jamieson, Miller & Watts 1988)*

Without doubt TVEI has produced changes in the secondary school curriculum, for example schools were required to provide technology, and to include work experience for all students during years 10 and 11. In return they received additional funding which many schools used to improve their IT provision. In some cases subjects experienced enhanced status because they were offering courses which attracted able students. (Barnes et al. 1987)



The initiative undoubtedly provided a fillip to aspects of the curriculum which prepared students for the world of work, but it was by no means an unqualified success. In some schools there was a considerable amount of inertia both from teachers and senior management to the initiative. Other schools adapted the initiative to 'fit in' with their existing curriculum. The sheer size of the initiative together with various local adaptations led inevitably to a somewhat uneven implementation. (Barnes et al. 1987)

The speed with which the initiative was introduced often meant that teachers were ill prepared, particularly when they were required to adopt changes in teaching styles. There was, perhaps inevitably, a bitter resentment from those curriculum areas not included in the initiative, about the levels of resourcing being channelled into specific subject areas. (Barnes et al. 1987) There were also those who questioned whether the curriculum should be concerned with training for the labour market. Some LEAs refused to become involved, seeing TVEI as the government imposing its 'doctrinaire' policies. (Hitchcock 1988, p.14)

Some educationalists, particularly those within the Schools/Industry field, saw TVEI as the forerunner of the National Curriculum (Senker, 1990) where Careers Education, Economic and Industrial Understanding and aspects of Information Technology are all Cross-Curricular Themes and therefore a basic entitlement for all students. (National Curriculum Council-Curriculum Guidance 3 1990)

*"Pupils need education for economic and industrial understanding, to help them contribute to an industrialised and highly technological society. With the increasing competitiveness, both in the European Community and worldwide, the nation's prosperity depends more than ever on the knowledge, understanding and skills of young people. To meet this challenge pupils need to understand enterprise and wealth creation and develop entrepreneurial skills. (NCC 1990)*

In many counties, the Local Education Authority has joined with local businesses to create a new link in the form of an Education Business Partnership (EBP). The main aim for such organisations is to provide a local, coherent structure to harness the numerous links and initiatives from various parts of the schools/industry movement. (Foundation for Education Business Partnerships (FEBP), 1990) The EBPs provide opportunities for every school to benefit from the involvement of local industries in the work of the school, either by helping to plan curriculum materials, or by assisting a teacher in the classroom. The FEBP provides a national structure to the EBPs and identifies areas of good practice for wider dissemination. (FEBP 1990)

In the past few years, the Government has also started to establish Training and Enterprise Councils (TECs - LEC in Scotland) throughout the country, an idea adapted from organisations in the USA including the 'Private Industry Councils' (PICs) and 'Compact' (A formal relationship between schools and local business relating to pupil performance and the provision of certain levels of work experience , job opportunities etc.) (Lawlor & McKay 1989, pp 132-144) . When fully operational the TECs' remit will be:

*"... way beyond coping with school leavers with few, if any qualifications. The plan is not only for TECs to manage existing programmes such as YTS, Employment Training, Business Growth Training, Small Firms Counselling, the Enterprise Allowance Scheme, Training Access Points and the Training of Trainers, and to be involved in the development of TVEI and Work Related Further Education. TECs will be charged with assessing the economic and social needs of their locality, deciding on priorities and allocating resources to stimulate local economic development." (Coffield 1990 p.70)*

This chapter has charted the continuing debate between liberal and vocational claims on the secondary school curriculum. Stated simplistically, it is a conflict between those who saw a need for schools to respond to the 'new realities' of an industrialised society seeking to compete, not altogether successfully, with emerging industrial nations from around the world, and those who wished to continue with a form of liberal education which evaded the educational conse-

quences of industrialisation by pursuing knowledge for its own sake. (Carr 1993)

The above states the extremes, and it has to be said that many educationa-  
lists, and possibly politicians too, feel that a working compromise position is  
possible. (Bridges 1992) Such a position would be one which helps to develop  
the skills and knowledge required for a technologically advanced workforce,  
whilst providing basic educational needs which would prepare the individual  
for democratic life. However, the position has been complicated by the prevail-  
ing view that saw 'practical' or 'vocational' subjects as low status options com-  
pare with the liberal or academic curriculum. Only In recent years has the gov-  
ernment attempted to generate parity between the two extremes.

Throughout the period reviewed five complaints about the educational system  
seem to emerge.

- That educational standards are falling (sometimes linked with a com-  
parison of the position of rival industrial nations).
- That teachers have jaundiced and negative attitudes towards industry
- That students leaving full time education hold negative attitudes to-  
wards industry
- That education is biased in favour of academia and encourages the  
most talented students to remain within education rather than working  
for industry
- That education simply is not producing student that are suited to the  
needs of industry

These complaints are largely dependant on the belief that education exists  
solely to produce recruits for industry, ignoring completely the view that stu-  
dents need to inculcated into many aspects of human endeavour. The  
rhetoric is dependant on the social, political and economic conditions existing

at the time, and the current concern with vocationalism perhaps illustrates this point.

However, given the continued interest and concern in the relationship between education and industry that has been traced through the last 100 years, schools will no doubt continue to utilise a variety of approaches to introduce students to the world of work. The following chapter attempts to address some of the complaints listed above, and considers some of the most common examples used in the secondary phase of education to introduce students to the world of work, including work experience, and the focus of the present study, the mini-enterprise company.

## CHAPTER 2

### **The Schools-Industry Movement and The New Vocationalism**

Interest in vocationalism is not new, as the previous section illustrated, and during the mid 1970s and early 1980s many organisations outside the educational establishment were keen to make an input into the life of schools. Various projects were established, sometimes set up as charitable trusts as in the case of Project Trident, (which organises a programme of community work and work experience for young people), and Young Enterprise (which helps young people set up and run their own companies - which will be described in detail later). These projects were financed by industry, trade unions and sometime by the government, (although usually through the DTI rather than the DES) and sometimes by groups of sponsors from several of these sectors. The projects tended to have very specific objectives and to operate:

*"... on the 'Heineken' principle of curriculum change, by attempting to reach the places that ordinary curriculum of schooling cannot penetrate." (Jamieson & Esland 1989, p.11)*

When these projects first appeared in the late 1970s, they were not coordinated very well and their objectives often overlapped causing some confusion to schools attempting to use the resources being offered. (Varlaam 1984, p.7)

The activities of the Schools-Industry movement together with the government's official responses such as TVEI, became part of what has become known as the 'new vocationalism':

*"... the name given to the large number of initiatives that were launched in the 1970s in an attempt to give education, particularly 14-19 education, a vocational dimension." (Jamieson 1990, p.56)*

SCIP, TVEI and TVEI (E) might well have been some of the most important of these initiatives, but there were others, such as the Lower Attaining Pupils Programme (LAPP) introduced by the DES in 1982, which emphasised basic skills

and an appreciation of technology, industry and commerce. The more business orientated examining boards such as RSA , the City and Guilds of London Institute (CGLI) and BTEC pioneered new vocational and pre-vocational qualifications. The best known of the pre-vocational qualifications was the Certificate of Pre-vocational Education (CPVE) which was a 17 + qualification.

As the financial climate in this country worsened, so there was more of a tendency to look for areas of deficit within the educational system in an attempt to ensure that students were more adequately prepared prior to their entry into the world of work. (Watts 1983, p.177; Fiddy 1986; Wellington 1987) The economic situation in this country was certainly not as healthy as that of our EC competitors, but no wide ranging analysis of possible causes for this decline seems to have been conducted, instead attention focused on the inadequacies of the educational system which was seen as the root cause of the country's problems.

As Britain was a member of the EC, comparisons were inevitably made with other member nations as well as trading rivals.

*"The National Economic Development Office published 'Competence and Competition'(NEDO, 1984), which presented a detailed examination of the education and training systems of Japan, West Germany and the U.S.A. The common thread to all of these developments is the importance of the vocational dimension to education. The New Vocationalism is not the product of a special set of circumstances in Britain in the late 1970's and 1980's - it is a phenomenon of nearly all the advanced industrial nations." (Jamieson 1990, p. 18)*

Three basic criticisms were made of the general standard of education. The first asserted that the standard education in this country was lower than that of our competitors and industry had to embark on remedial measures in order to ensure a skilled workforce. Secondly, that the quantity of education was deficient and that not enough young people were continuing their education post 16 compared with other countries. Finally there were criticisms of the content

of education, in that not enough education was relevant to the needs of the economy. (Spours & Young 1988; Stronach 1989; Jamieson 1990)

To address these criticisms the government launched the TVEI pilot described in the previous chapter.

The Government at the time had no way of forcing Local Education Authorities, or the schools within their control, to adopt their TVEI policy. It therefore utilised, a new approach which has been termed 'Categorical Funding':

*"Categorical funding is ... a strategy which can be used to facilitate a policy where the policy makers or their intending agency, under existing conditions, have neither the 'statutory right' nor the 'means' to implement the desired changes without the cooperation of those who have both. They do however have the 'resources' and proceed to use the normal processes of contract to implement their policies." (Harland 1987, pp. 39 - 40)*

At a time when schools were short of resources, the idea of adopting a carrot rather than a stick, to encourage schools to develop their curriculum was almost certain to attract some support.

The 'New Vocationalism' has certainly been a controversial issue, not only within the educational system, but also with those who are concerned with the performance of the economic system. Many of the initiatives identified with the New Vocationalism, for example, LAPP, TVEI, TRIST (TVEI Related In-Service Training) were initiated by the Conservative government and were therefore, inevitably perhaps, going to be criticised by politicians from the other parties.

*"... it is worth underlining ... that TVEI did not start its life as a limited, clearly specified programme designed to use categorical funding to achieve precise aims. It began - and continued ... no less politically than any other educational reform." (Fulton 1987, p.215)*

Stronach has detailed the political dichotomy of the educational activities undertaken by the numerous initiatives:

*"'Left-vocationalists', hope that they are in the business of emancipation, empowerment and education.....'Right- vocationalists', speak of a language of reality, enterprise and employability." (Stronach 1989, p.14)*

Law referred to this process of political identification as the 'Colour Coding' of the curriculum suggesting:

*"... education for 'self-employment', 'enterprise', 'competitiveness' and 'mini-companies' has - for some observers - an unmistakable bluish hue. While curriculum material concerning 'communes', 'cooperatives' and 'dealing with DHSS', seems - to others - to be decidedly pink." (Law, 1983)*

He went on to suggest that some curricular activities associated with voluntary work, or perhaps preparation for adult life, in the form of leisure activities like arts, crafts and physical education, might be orange or perhaps green? It has also been suggested that students use vocationally orientated activities as a means of entry to the 'black' and 'purple' economies. (Rees 1988, p.15)

What appeared to be clear, at least to the government of the time, was that the educational system and the activities of those who worked within it, was responsible for the country's poor industrial performance, rather than any aspect of its own economic policy. To address the situation, a positive injection of 'vocational education' was needed.

However, there have been a number of educationalists who have been critical of the content of the vocational programmes who suggest that as yet, nobody has demonstrated a connection between a specific form of curriculum and economic success. (Barker, 1987) Holt suggests that the responsibility for this country's lack of economic success lies elsewhere. In the lack of economic planning by the government, the conservative approach of our banks to long



term loans, the divisiveness of our society and the lack of regard for the arts which has led to the production of unattractively designed goods.

*"... the easy answer of skills and vocationalism has diverted attention from the real defects of our educational system. By establishing vocational courses alongside a traditional academic programme animated by a nineteenth century model of specialist education, it has sustained a divisive culture and at the same time propped up a defective, narrowing curriculum which most other developed countries had begun to abandon by the early years of this century." (Holt 1987, p.2)*

Varlaam (1984) suggested that changes in demographic trends in the UK from the mid 1950s to the mid 1960s, coupled with more women joining the labour market boosted the unemployment figures, (one of the measures used by politicians to measure the economic state of the country).

Not only were there doubts about education being responsible for the country's economic problems, there were also concerns about the approach being adopted to address the problem. Furthermore, returning to the historical development of British industry, one might question why there is a need for vocational education now, when the earlier developments were possible in the absence of a national education system.

*"The suspicion must remain that, historically, the origins of industrial success lie well outside the educational system, on factors such as maritime access to imperial markets." (Golby 1987, p.16)*

The counter argument might cite the educational practices of our EC partners, notably Germany, France and the Netherlands and their highly developed vocational curriculum. (Praise and Beadle, 1991) However, some of our competitors seem to prefer schools to concentrate on a sound general education leaving the vocational aspects to be taught in the workplace when required. (Wellington 1987, p. 37, Corbett, Greenlees, 1993)

Critics also argue that if education is predominately focused on vocational issues individual students will not learn about cultural and leisure activities.

What will employees do with the 'spoils' of employment? After all, work is not everything, and a broad 'liberal' curriculum, they argue, provides opportunities for diversity, creativity and the ability to cope with change in the future.

Perhaps one of the most damning criticism of vocational education is that it tends to be biased towards a 'behaviourist, psychomotor conception of skill, devoid of any knowledge base or context. (Wellington 1987, p.39) This may be an extreme view, but there are certainly many educationalists who believe that the curriculum is too academic and that making it more practical will both improve student motivation and ensure that the curriculum relates to the needs of industry. (Jamieson, 1990 p.59)

There are several problems with the practicalization of the curriculum. To begin with it assumes that students find the problems of industry interesting and relevant. In fact, there is no proven connection between work related problems and student interest or motivation. Secondly, vocational approaches tend to emphasise certain modes of learning, said to be predominant in the industrial world. These are:

*"... variously described as experiential, experience based, active, student centred, flexible etc." (Jamieson 1990, p.59)*

The latter point is perhaps less damning. For advocates of the traditional didactic approach, could certainly not claim that it was a universally successful teaching style with all students. Perhaps therefore, the most favourable interpretation that can be placed on vocational (and perhaps enterprise) activities, is that they use of a range of different approaches, some of which encourage a dialogue between student and teacher, which in turn will improve student interest and motivation?

Vocationalists also claim to be addressing the criticism that education does not provide 'quality students' of school leaving age, by providing an alternative

to a faulty liberal curriculum that had traditionally failed many students. (Wellington 1987, p.15; Holt 1987, p. 70). Certainly in the initial phases of TVEI, schools did not have to provide a 'TVEI curriculum for all students and schemes were generally aimed at the lower 40% of young people in our secondary schools. Indeed, David Young stated:

*"... the scheme was not intended for pupils who were taking good 'O' and 'A' levels. They are not going to join the scheme. My concern is for those who are bright and able and haven't been attracted by academic subjects." (Young - reported in Education 24.12.82)*

Pring however, suggested that TVEI was a form of 'Trojan Horse', which has forced educationalists to reconceptualise the processes through which we educate young people. (Pring 1985, pp. 14-17) Holt refutes this, arguing that the means of curriculum change does not justify the end and calls for some *a priori* reasoning about the nature of education and the good of man. (Holt 1987, p.72) Despite this argument, the curriculum of most secondary schools during the past decade has been influenced by TVEI which seems to suggest that teachers perceive certain benefits. In any event, it has certainly been made available to a wider cohort than that described by David Young.

Despite the lack of a sound philosophical base, secondary schools have gradually warmed to new vocational programmes as they have provided extra resources and enabled them to facilitate a number of educational developments, such as work experience, improvements in technology and pupil profiles and records of achievement. Senker however, whilst acknowledging that schools were making good use of the resources that came through TVEI, argued that they could be better used if they were distributed on a more rational basis. (Senker 1990, p. 28)

Two issues continue to dominate recent debate about the new vocationalism:

*"The first asks what is the relationship between the education system, and particularly the new vocationalism, and economic performance. The second asks whether the new vocationalism can claim to be about education rather than training." (Jamieson 1990, p.25)*

As we have seen, simple national economic comparisons have not been helpful, for whilst it is easy to show that some nations have been economically more successful than Britain, similar comparisons will also show that the same countries have different approaches to education, and indeed different ways of life, cultural values and national priorities. (Senker 1990, pp.124-125)

There are however three areas of concern which can be identified; that economic change is rapid, that there are rapid advances in new technologies and that international competition is fierce. What is less certain, is the nature of the British economy and how, if at all, the educational system can be organised to ensure students are prepared to face the rigours of the world of work in the future. Few in the Department for Education (DFE) are blessed with accurate visionary power, able to foresee the needs of industry in the future. Even accurate predictions could be made, by the time the educational system, not known for its flexibility, responded, a new set of objectives would have emerged.

Government assumptions seem to be that Britain will be engaged in the high value-added end of world markets, yet the signs are that by allowing leaving strategic decisions to the market, it has in fact encouraged involvement in the mass production, low quality, low skill end of the world economy. (Cooper 1991, pp. 5-6, Ashton, 1992))

*"...the Japanese and German governments have encouraged employers to concentrate on the production of high value added products. Other governments, such as those of the UK and USA have opted to let the operation of the market place determine which product markets companies in their countries operate in; a strategy which appears to be pushing them in the direction of low value added products." (Ashton, p. 12, 1992)*

Whatever the truth of this debate, there is still some doubt that the path of the new vocationalism can produce students who have the requisite skills to enter such complex commercial or industrial systems. (Grubb 1987, Coffield 1990)

Questions have also been asked, by both industrialists and educationalists, about the attention paid by the new vocationalism to 'core skills', particularly those which are deemed 'transferable' across a range of occupations. (Coffield 1990 pp. 64-67)

The second area of concern centres around the educational value of the new vocational curriculum. Should schools be concerned with equipping students with the skills, knowledge and attitudes that a healthy economy requires? Or, should they be concerned with:

*"... the cultivation of spiritual and moral values, with the nurturing of imagination and sensibility, with the transmission and re-interpretation of culture," (Watts 1983 p.2)*

Or should it try to accommodate both?

There are some who suspect that the concern with vocational aspects may be an attempt to undermine the comprehensive educational system with its goal of equality of opportunity for all students and return to some form of tripartite system of education.

*"... TVEI would tend to segregate pupils and was therefore incompatible with the principles of comprehensive education." (Hargreaves 1984 cited in McCulloch 1987 p. 31)*

Others saw the new vocationalism as a positive step towards equal opportunities, particularly in respect of gender issues.

*"... educational policy makers, particularly within the MSC, demonstrated that gender issues were beginning to be perceived as pertinent to the government's wider vocational project." (Weiner 1990 , p. 25)*

The problem in following a strictly vocational route as was stated above, is that one needs to be able to identify economic needs decades in advance, both in terms of skills required and demand for suitably qualified labour.

*"A vocational curriculum ill serves its pupils in precisely the respects that it claims to be strong. For it claims to prepare them for jobs in tomorrow's society by basing a curriculum on the skills seen as necessary today, Yet the incontestable fact about tomorrow is that it will be different from today, and will present quite new problems." (Holt 1983 , pp. 84- 86)*

Holt's case for the 'liberal' curriculum is that it provides students with personal and moral autonomy which will better equip them to solve the problems of the future.

The distinction between liberal and vocational education, however, has not been universally accepted. Spours and Young have argued for a curriculum 'Beyond Vocationalism'. This would include a broader form of vocationalism which would provide an additional dimension to the new forms of pedagogy.

*"Instead of accepting the division between academic and vocational courses, we are proposing that teachers should draw on academic disciplines to interrogate the world of work."(Spours & Young 1988)*

This view is supported by Stronach who suggests that the new pedagogy is not confined only to vocational preparation or pre-vocational education, but has a wide currency in branches of sociology, social work and counselling, and industrial management. (Stronach 1988 p. 16)

*"... we have to see vocationalism as something that has to be understood in terms of its range of meanings rather than in terms of once-and-for-all definition." (Stronach 1988)*

He cautions against a strictly vocational approach suggesting:

*"... the debate threatens to melt down into the structures of schooling itself, as the privatisation of schools follows the vocationalising of the curriculum." (Stronach 1989 p.26)*

Certainly the monopoly of schools over education has been questioned and, through TVEI and more recently Training and Enterprise Councils (TECs) and Local Enterprise Companies in Scotland (LECs), some elements of vocational training such as, motor vehicle maintenance and leisure studies, undertaken by students following National Vocational Qualifications (NVQ) whilst still at school, have already been sub-contracted to industry, or training providers. As the curriculum becomes more directly controlled by government it is hoped that the opportunities and modes of delivery will become more flexible.

*"As the client group for education and training widens and therefore becomes less homogeneous, teaching and learning styles will be replaced with greater variety. (Jamieson 1990b, p.8)*

It is certainly the government's wish to place the responsibility for vocational training in the hands of business, to prevent intervention by local government or the local education authorities. (Cooper 1991, p.26)

To summarise, the new vocationalism, in particular TVEI and TVEI (E), set out to encourage secondary education in this country to focus on areas of the curriculum thought to be of value to industry. The lack of consultation with LEAs and other interested parties caused a furore, particularly from those who espouse a 'liberal curriculum'. As we enter the 1990s and the era of a National Curriculum it is clear that the original design has lost something in its translation into schools. As Jamieson suggested, 'the contract is largely a myth'. (Jamieson 1990,(ii) p. 132) As far back as 1986 one of TVEI's assessors predicted that the initiative would fail. (Leach ,1986) In terms of the original objectives, there is some evidence to support this view, but in the way it has sparked off a debate about how and what is taught in secondary schools, it can be argued that it has achieved a measure of success.

The vocational initiative has not lost momentum as TVEI (E) enters its final phase. The newly established TECs and SCOTVEC continue where TVEI left

off. The introduction of Compacts (formal arrangements between students and employers), new forms of vocational accreditation NVQs and GNVQs and the provision of Training Credits (vouchers to enable school leavers to acquire training from their employer), have all contributed to a tighter bond between education and business.

Industry has also addressed the need for a rationale to underpin their support for the new vocationalism. The Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA), supported by a host of industrial sponsors, has produced a study of post compulsory (16 + ) education and training aimed at stimulating the vocational debate and influencing government policy in this area. (RSA, 1992)

In secondary schools, the National Curriculum has encompassed some of the vocational issues, both in technology and in the cross-curriculum theme of Economic and Industrial Understanding. Indeed some educationalists have suggested:

*"The National Curriculum itself can be seen as a form of Vocationalism. Though not related directly to particular jobs it does very much reflect the kind of response given by employers when asked their views about education." (Spours and Young, 1988, p.7)*

Others feel that the vocational debate has moved into the post 16 arena where it is argued, tripartite education is re-emerging, with 'A' levels for students aiming for higher management and the professions, TVEI and BTEC for students aiming for a middle technician track and YTS being the new 'modern' sector. (Jamieson 1990 (iii), p.30)

Perhaps what has emerged is a form of compromise, with the essential element of the 'liberal education' tradition in place within the National Curriculum, much as it has been in the past, but with the addition of an expectation of certain vocational elements woven in. Certainly 'enterprise education' has



emerged as an important part of the 'new vocationalism', and many people engaged in this area see it as a 'good thing'. They see the development of this aspect of the vocational curriculum as not only leading to wealth creation and new jobs, but also as a means of providing students with social skill useful to them as they enter the world of work. Unfortunately those involved in 'enterprise' seldom have a clear idea of what enterprise is and what precisely involvement in enterprise activities contributes either to the individual's personal development, or to the wealth creation process. Perhaps because of the lack of a clear definition of enterprise, (something which will be discussed later) a great deal of emphasis is placed on the value of practical work and academic study is somewhat undervalued. The following sections will therefore examine some of the predominant learning theories found in education and the concept of 'enterprise'.

## **Learning Theories**

Whilst at school, students' activities have tended to be largely directed and closely supervised by their teachers. This tends to contrast to the situation they are likely to find in the world of work, certainly in the high tech/high valued sectors which the Government favours.

Although the schools/industry movement has actively been promoting new teaching/learning styles in its attempts to influence the school curriculum and align it with the practices of industry, it has been criticised for failing to provide an explicit theory or model of learning. (Clough & Nixon 1989, p.11) Certainly the implicit model used, views learning as something:

*".. personal, dynamic and highly interactive. Individuals are seen as actively constructive of meaning within variable social contexts, which themselves promote or permit an infinity of interactions." (Clough & Nixon 1989, p. 12)*

The essence of the change, is a move away from intentions and methods to learning processes and outcomes, from a didactic to an active or experiential approach. This shift reflects an approach of the learning theory being used and it is therefore important that the change is viewed in the context of the various learning theories available.

The field of cognitive psychology is vast and has attracted the attention of psychologists who have postulated many different kinds of theory to explain the nature of learning. These theories vary not just in terms of the basic model and language, but also in terms of the scale, scope, purpose and focus. The theories are particularly useful because they help people to view how they learn and construct their own 'personal maps'. (Claxton 1984, p.8)

It has been suggested that there are four discernible traditions within which these theories can be categorised:

**Cognitive Learning Theories** - developed from the experimental work conducted to establish the way in which people remember things. This tradition started with Ebbinghaus in the last century and remained popular in the late 1960s when its 'associative' and 'information processing' models were expanded to include more complex kinds of learning such as problem solving and the understanding of language.

**Behavioural Learning Theories** - began with attempts to predict the behaviour of animals in simple situations. Gradually the 'conditioning' models were applied to more general concerns such as, the development of physical skills and the role of reward and punishment in the learning process.

**Social and Personality Learning Theories** - started by considering individual difference between humans and how people make sense of their world. During the 1940s the focus changed and the work was expanded to consider how

people's attitudes were formulated and how they changed. More recent models have considered the role of society in the formation of personality and the nature of our sense of 'self'.

**Humanist Learning Theories** - This collection of theories also began in the 1940 - 1950s and emanated from an attempt to explain how people's feelings and their capacity to feel were changed by various forms of group, or one to one, counselling experience. The concerns expanded to consider 'personal growth' and the limits of human development and the importance of concepts such as love, vulnerability and acceptance. (Claxton 1984, pp.8-9)

Each group of theories became associated with different aspects of education. The cognitive group became associated with the words logic, language, reasoning and knowledge. In this context, the role of the teacher was that of an instructor, a communicator of facts and arguments. (Claxton 1984, p.9)

Behaviourists were more concerned to define with great precision the behaviour desired in a given situation. Hence the need for behavioural objectives which specify precisely the stimulus, (or conditions) and the response (or behaviour and standards). (Boydell 1976, p.3-4)

Social and personality theories focused on people's beliefs, opinions, attitudes and judgements about themselves and others.

*"The teacher is often seen here as a model or example or 'exuder' of a certain personal style that is not directly taught but which may nonetheless be picked up by his students. Such theories fall between the two poles of pure reason and raw emotion, the latter being the the central preserve of the humanist theories." (Claxton 1984, p.9)*

The growth of interest in various types of vocational activities has led, in recent years, to considerable interest in alternative teaching/learning models, specifically, those that focus on the learner rather than content where the role of the

teacher is that of facilitator. That is, from a didactic approach to various forms of active and experiential learning. (Clough et al., 1989)

## **Experiential Education**

The use of the term, 'Experiential Education' is not new. Before formal schooling it was the only form of additional learning possible besides the normal process of socialisation, (Jamieson et al., 1988) and in one form or another it has been recognised for at least 2000 years. (Brandes & Ginnis, 1986) Different phrases have been used however, to describe this approach:

'Student Centred Learning' - Carl Rogers,  
'Enquiry' - Socrates,  
'Experimental' - Dewey,  
'Humanistic' - Weinstein,  
'Confluent' - Brown,  
'Androgogy' - Knowles,  
'Progressive' - Bennett,  
'Active Tutorial Work' - Button,  
'Participatory Learning' (Brandes & Ginnis, 1986 p.10)

During the late 1970s and early 1980s, there was a certain amount of apprehension on the part of the teaching profession about adopting different teaching styles. Prior to this period, most teachers had been trained to use a didactic approach and the expectations from parents, governors and senior managers in schools tended to act as a deterrent to change:

*"... there can be no doubt that for most of the time the prevailing orthodoxy is didacticism. The tutor possesses certain knowledge or particular skills and the main business tends to concentrate upon the transmission of these to the students. (Dennison & Kirk, p.5 1990)*

Paradoxically, the use of a didactic approach has developed with increasing industrialisation, with two consequential problems. The approach has engendered an underlying disdain for vocational education and work in the manufacturing industry and it has encouraged a move from the learning and teaching styles which are common in industry:

*"... that is, teaching that stays close to real problems, and learning by trying things out."  
(Jamieson et al., 1988)*

It is easy to see the attraction for teachers of a didactic approach. It is teacher centred, directive, corrective and predominantly concerned with the acquisition of knowledge in well defined subject areas. (Kirk, 1987) If one adopts the highly instrumental 'cognitive' approach where the teacher teaches and the student learns, then the focus is on the material to be transmitted, the skills to be learned and the various arrangements necessary to support the transfer. (Kirk & Dennison, 1990):

*"At worst a pedagogy emerges which tries to provide answers when the potential learners have not yet asked the questions." (Dennison & Kirk, 1990)*

Whilst it is undoubtedly true, that students can learn from any teaching method, (Beswick, 1987) some argue, that the didactic approach is far too simplistic and treats the student as some form of empty vessel which is waiting (and willing) to be filled. This school of thought, tending towards the humanist tradition, would prefer to put the emphasis on the student:

*"I know I cannot teach anyone anything, I can only provide an environment in which he can learn." (Rogers 1965, p. 389 Client Centred Therapy)*

The advocates of more active learning strategies, those in the humanist tradition, stress the importance of the learning 'process', rather than specified 'outcomes'; for them education is about ensuring that students can do, rather than simply 'knowing' something because they have learned facts in a rote fashion. (Henry 1989, p.28)

Law has suggested a useful distinction between 'Participative', 'Experiential' and 'Experience Based' learning methods. (Law 1986, pp. 131-2) Participative methods involve the student being active and the teacher having a clear idea of the intended outcomes. Whilst such an approach is particularly advantageous in encouraging students to participate in problem solving or specific skill acquisition, there is always an element of uncertainty as to the actual learning that has taken place.

The experiential approach invites students to become personally involved, either in response to the teachers' invitation for a spontaneous reaction to a specific situation, or in a more pre-planned way during a constructed experience such as a specific role play situation. Law suggests that in such cases the curriculum is 'what students say and do', and is particularly appropriate to the vocational context when so often there is no right or wrong answer.

Experienced based learning requires a direct personal involvement with the selected subject/object of study, as in the case of work experience in schools. Although many examples of experience based learning take place outside schools, students can benefit from the experiences of others, if an interactive encounter is possible. As in the case of adults participating (AOTs) in Young Enterprise groups, bringing their experiences of work to help students come to terms with simulated work related issues.

To many educationalists, experiential types of learning are messy because of the difficulty of specifying the desired outcomes. However despite its student centred approach:

*"Experiential learning, if it is to be effective, must be both well organised and purposeful. Because the intention is to assist students to construct their own learning cycle, which only they can control, it does not follow that sessions should be devoid of structure. (Dennison & Kirk 1990, p. 11)*

Indeed, lack of a clear purpose can encourage students to adopt inappropriate models of work and bad practice as studies in an industrial context have indicated. (Argyle 1972 p.228)

Weil and McGill suggest that experiential learning has a range of meanings, practices and ideologies and that people tend towards one of four clusters which they refer to as 'villages'.

Village One - is concerned with assessing and accrediting learning from life and work experience as the basis for creating new routes into higher education, employment and training opportunities, which are prerequisites for professional bodies.

Village Two - focuses on experiential learning as the basis for bringing about change in structures, purposes and curricula of post school education.

Village Three - emphasizes experiential learning as the basis for group consciousness raising, community action and social change.

Village Four - is concerned with personal growth and development and experiential learning approaches that have increased self-awareness and group effectiveness. (Weil & McGill, 1989)

Weil and McGill suggest that concentration on one 'village' alone will inhibit the realisation of learners' ideas and values. By dialogue across the villages new perspectives can be considered and contradictions can be made clear.

Clough and Nixon have identified three clusters of discernible features associated with experiential education.

*(i) Learning becomes the responsibility of the student and the student is actively involved in the construction of meaning, in the act of 'making relevant'.*

*(ii) Learning is situational; that is, learning does not take place in 'the student's head', as it were, but rather in his or her interaction with specific phenomena in particular contexts.*

*(iii) Learning is provisional most of what is 'learned' is subject to occasional if not frequent revision in the light of changing circumstances. (Clough & Nixon 1989, pp. 12-13)*

The experiential approach is far more difficult for the teacher to control, full of organisational complexity and uncertainty. In the didactic paradigm, the foci are predominately cognitive and the student memorises, understands applies and transfers some knowledge (and/or) skills. (Dennison & Kirk, 1990) Each step of this process is testable, although one may wish to question the reliability and validity of such tests.

By comparison, the organisation of an experiential approach is far more problematic for the teacher and the student, because of the emphasis on the students being encouraged to generate their own cognitions, affects and conations. (Boydell 1976) However, Law suggests that it is possible to pre-design teaching and learning situations even though the outcomes cannot be predicted with any accuracy. For him, this is a reflection of the realities of life where quite often there are no right or wrong solutions. (Law 1986, pp.131 - 2)

Given the uncertainty of experiential approaches, and the caution offered by Clough and Nixon (1989), teachers undoubtedly need a clear conceptual model. A number of experiential learning models have been suggested in recent years but by far the most influential has been that of Kolb (1984). Kolb's model has been heavily influenced by the work of Dewey, Piaget and Lewin.

Lewin's model conceived learning as a four stage cycle, of 'concrete experience', 'reflective observation', 'abstract conceptualisation' and 'active experimentation'. (Jamieson et. al. 1988 p.11) The essential features are the emphasis on the here and now concrete experience to validate and test concrete



experiences and concept of feedback, which Lewin used to describe a social learning and problem solving process that generates valid information to assess deviations from desired goals. (Kolb 1984, p.22)

Dewey's work is particularly interesting in the context of the work of the Schools/Industry movement because after his extensive travel in other countries he was particularly keen to persuade education to adopt a model more in line with the pace of change within industry. (Jamieson et al. 1988, p.8) He suggested that children learnt through their interaction with the environment and developed their minds through this interactive behaviour.

His model was similar to that of Lewin, but he placed more emphasis on:

*"... learning as a dialectic process integrating experience and concepts, observations and actions." (Kolb 1984, p.22)*

He suggested that students' experiences provided the motivation for action, but that some pause for thought and reflection was essential to enable them to make judgements on the action required to complete their tasks successfully. It is through the integration of these two opposing, but related processes that students develop a mature sense of purpose, as opposed to continually blind, often instinctive impulses.

Piaget identified four major stages of cognitive development; the sensori-motor period, the pre-conceptual stage, the concrete operational stage and the formal operational stage. He suggested that children pass systematically through the stages from one to another. Learning results from the mutual interaction between the process of 'accommodation' of concepts or schemas to experience, and the process of 'assimilation' of events and experiences into existing concepts or schemas. (Beard 1969, pp.2-7) Learning was a balance between the two processes.

*"When accommodation processes dominate assimilation, we have imitation - the moulding of oneself to the environmental contours or constraints. When assimilation predominates over accommodation, we have play - the imposition of one's concept and images without regard to environmental realities. The process of cognitive growth from concrete to abstract and from active to reflective is based on this continual transaction between assimilation and accommodation, occurring in successive stages, each of which incorporates what has gone before into a new, higher level of cognitive functioning. (Kolb 1984, p.23)*

Kolb integrated features of these models and suggested a four stage learning cycle; 'Concrete Experience' - which provides the basis for, 'Observation and Reflection' - which enables the 'Formation of Abstract Concepts and Generalisation' - which leads to a process of, 'Testing Implications in New Situations' - which returns the learner to a 'Concrete Experience'. (Kolb 1986, p.101) He has also analysed how different learners adopt different learning styles placing different emphasis on each stage of the process. Thus convergent learning styles are dependant on abstract conceptualisation and active experimentation, whereas divergent styles emphasise concrete experience and reflective observation. (Kolb, 1986)

The important feature of the model is that it demonstrates the power of bringing the learning stages close together so that they operate as an ongoing cycle. This contrasts with traditional learning situations, where the stages are often separated and students do not have a chance to test out abstract concepts until they have left school and entered the world of work. (Jamieson et al 1988, p.11)

Despite being highly influential, Kolb's model is not without critics. Henry (1989) suggests that it was too general and overlapped with other theories of learning. This made it difficult for outsiders to register how experiential learning was different from any other kind. Furthermore, she suggests that the position has been exacerbated by proponents of experiential learning using different keywords to summarise their understanding of Kolb's cycle and experien-

tial learning. (Henry 1989, p.26) She suggested that an approach that attempted to relate various experiential learning approaches to these different stages would be more helpful than any precis of the model. Whilst there are examples of such approaches, (Gibbs 1987, Packham, Roberts & Bawden 1989) 'experiential' practitioners tend to find simplistic models more helpful than worked examples which might not be in an appropriate context.

Recently, Kirk (1987) has outlined an example of a simple experiential learning cycle which was devised by the Development Training Advisory Group. Although not dissimilar to that of Kolb, it has the advantage of being more easily assimilated by the educational practitioner.

The model has four stages, Do - Review - Learn - Apply. He suggests that teachers have a direct influence on students learning potential using the model, as they can provide a clear framework for Doing. They can help to motivate their students by persuasion and explanation, although they cannot specify what is actually done. At the review stage teachers can initiate discussion, challenge the more introverted students, offer insights about specific features of the experience and provide guidance to students who are either unable, or unwilling to review their experiences. He goes on to suggest that there are multifarious ways in which students can apply their learning: Either directly in future learning cycles or in completely different situations unrelated to the initial experience. (Kirk, 1990)

The teacher clearly has an important and distinctive role in the first two stages, but no matter how well organised these two stages are:

*"... the processes of learning and application are internal to the individual student, and well beyond the control of a tutor." (Kirk 1990 , p.4)*

Despite the powerful arguments made in favour of experiential learning methods, it has several problems for teachers following very tightly proscribed pro-

grammes of study, such as the National Curriculum in the UK. Each student has a range of experiences, some of which will be unique, which makes it difficult for the teacher's forward planning. Clearly, open ended tasks, such as mini-enterprise, provide a useful context for such learning and enable different students to share their expertise with others in their group. The question remains, is such learning cost effective, could the experiences be learned more quickly in a more teacher controlled situation? If a comparison is made between our system of education and that of one of our major competitors, Japan, then this question must receive serious consideration. For there:

*"Pupils learn facts to pass exams" and " To get through the courses of study teachers are forced to adopt formal teaching methods and issue large amounts of homework, Chalk and talk lessons are still the norm with pupils sitting passively for long periods listening to their teachers." (Greenlees 1993)*

The system is criticised for not allowing students time to discuss issues or to think things out for themselves, yet it has allowed the vast majority of students to learn quickly and achieve impressive results. Once again, a compromise, a mixture of the two approaches seems the way forward but would this be at the expense of continuing 'enterprise activities'?

### **The Concept of 'Enterprise'**

In its analysis of Britain's industrial decline, the government identified the need to encourage 'enterprise', as a way of improving the economy. (Joseph, 1986, cited in Crompton 1987) During the 1980's the idea of creating an 'Enterprise Culture', became a cornerstone of the Conservative party's economic policy and this, as the previous chapters have illustrated, influenced their attitudes towards education.

The idea of an 'Enterprise Culture' unfortunately, means different things to different people, as Gibb points out,;

*"Definitions are the product of the age, culture (as well as language), and are often shaped in a political context." (Gibb, 1987 p.3)*

The concept of 'enterprise' has not been well defined by either politicians, or educationalists, and there is certainly a great deal of discussion between academics in various disciplines as to what exactly the concept means. (see Cofield 1990, Francis, 1991) It is therefore, not surprising that a certain amount of confusion has emerged in the general use of the concepts of enterprise and entrepreneurship, the use of the word enterprising, and the activities undertaken under the banner of 'enterprise education'.

The dictionary defines an 'enterprise' as a project that requires boldness or effort. Clearly such a project may, or may not be a business, and the word could therefore describe a whole range of activities undertaken within the community. Many people could be described as 'enterprising' when undertaking a range of leisure activities, or because of the way they respond to emergencies, or because of an interest they take in a specific project.

Definitions of the entrepreneur are equally wide ranging, from the common view of someone who brings together various factors of production to make money, to a form of:

*".. deviant driven by the combination of social circumstance and personality towards a particular 'innovative' form of behaviour." (Gibb, 1987 p. 4)*

Francis (1991, p.27) conducted a semantic differential exercise with a group of students in an attempt to clarify the confusion surrounding the concept of 'enterprise', and 'entrepreneurship'. They concluded:

*"(i) An enterprising person is not necessarily an entrepreneur, but an entrepreneur must have the qualities, the attributes associated with enterprise.*

*(ii) The educationalist who is enterprising puts his integrity on the line by being innovative, explorative, imaginative - he is laying himself open, if you like, and that's a personal risk.*

(iii) *An enterprise seems to involve some kind of collaboration of people working together - an entrepreneur could be one person, at it to take personal gains for him or herself.*

(iv) *Enterprise is a more human, social process."*

One of the reactions of 'enterprise specialists' to Francis's analysis was that definitions are often not very helpful, unless they are placed in context, and it might be useful to consider how education and enterprise have come together.

Some educationalists are unhappy about the way in which the government has chosen to use the word, enterprise. In the words of one academic:

*"Enterprise in its non-political sense has **always** been part of education - always - and it is the politicising of it I object to." (cited in - Francis, 1991, p.29)*

Despite the philosophical concerns some educationalists had, Jamieson attempted to tease out some of the different uses of the word by looking at enterprise in practice:

*"What do schools mean when they say they are 'educating for enterprise'? In essence there appear to be three positions. Position 1 conceives education for enterprise narrowly as educating young people to start up their own small businesses. The accent is on 'start up' and on 'small business'. Position 2 is perhaps best caught by the 'Society of Education Officers' paper on Key Issues for Industry and Education (SEO 1983). They say that the term 'education for enterprise' 'is used to describe a curriculum which fosters skills, attitudes and values appropriate to starting, owning, managing or working in a successful business enterprise.' The scope has widened, small business has given way to 'business' and the accent is as much on running and working in a business as on starting up. Position 3 is signified by a change of grammar - from the noun 'enterprise' with its strong connotations of business, to the adjective 'enterprising' with its concern that young people should have the skills, knowledge and attitudes to go out and create their own futures, and solve their own problems. The third position certainly embraces the world of business, but this is by no means its only concern." (Jamieson 1984, p. 19)*

This has been refined by Crompton (1987) into three clear categories:

**Education for Enterprise:** which refers to schemes which attempt to provide a controlled situation in which pupils can develop; an ability to take calculated

risks, to develop innovation skills, and to develop the knowledge, skills and attitudes necessary for setting up and running a small business.

**Education about Enterprise:** which generally uses the experience of participating in the running of a simulated company (mini-enterprise) as the basis for helping students to gain some understanding of the mechanics of industry and commerce. In addition, mini-enterprises (MEs) could also provide opportunities to explore wealth creation, marketing, finance, and business organisation by enabling students to undertake various tasks.

**Education through Enterprise:** which offers a vehicle to promote students' personal development by, for example, allowing them to communicate with each other and work as a team, showing their initiative and drive. This model could certainly be developed within a business context, but it could equally be developed in other areas of the secondary school curriculum, such as physical education.

Underlying these perspectives Crompton argues, are two broad notions of enterprise culture. The first, which is seen to address the deficiencies of the economy which were described in a previous chapter, argues that the country's economic difficulties would be overcome if more people were willing to set up and start new businesses. Education's role in this scenario, is to provide experiences that will develop a positive attitude towards being an entrepreneur.

The alternative interpretation is that everyone needs to be more enterprising to be able to cope with our rapidly changing society. It argues for the development of greater creativity and problem solving abilities to enable individuals to direct their own lives. (Crompton 1987, p9)

There is perhaps, a third notion which combines elements of both these alternatives in varying degrees. The government clearly wanted to encourage the growth of small businesses because they were viewed as more likely to utilise new technologies and because they were more likely to have the management structures in place to exploit them. (Cannon p.16, 1991) To many teachers however, this slapped of propaganda, and many would much rather take a 'child centred' view, which encouraged the development of the individual to enable them to become more autonomous and flexible learners. It is possibly that because many teachers either do not wish to take a distinct position on one model or the other, or because they can see merit in both, that there is often confusion about the aims of enterprise in education.

The general public appears to view enterprise as synonymous with entrepreneurial activities and business, (Education for Enterprise). This may well be the result of extensive publicity of the government's view in the press and on television.

*"More recently the need to generate 'enterprise culture' has been emphasised. The public strongly associates 'enterprise' with 'entrepreneurial' and hence 'enterprise education' with education for small business and self employment." (Crompton 1987, p.5)*

This has been unfortunate in that it has tended to obscure various facets of enterprise and their relationship with education. As Johnson suggested:

*"... linguistically and philosophically the essence of the entrepreneur is enterprise but enterprise is not restricted to entrepreneurs." (Johnson 1988, p.61)*

This view is supported by Cunningham and Lischeron who detail six schools of thought on entrepreneurship, each with its own set of beliefs. These are detailed in Table A. They suggest that there is a need to reconcile these schools as each provides detailed and useful insights into the various facets of entrepreneurial activity. They conclude that:



*"The selection of an entrepreneurial model depends on the information the researcher or educator wishes to emphasise in focusing on different aspects of the entrepreneurial process." (Cunningham and Lischeron 1991)*

## **Table A**

There is certainly an overlap between some of the models presented by Cunningham and Lischeron, and Johnson's model. Johnson appears to include aspects of three of these models, the 'Great Person', 'The Management School' and the 'Leadership School'. He attempts to provide further clarification by suggesting that current practice uses two inter-related definitions. The first defines enterprise as a set of attributes, a high need for achievement, a high need for autonomy, an internal locus of control, an ability to take calculated risks, innovativeness/creativity (He terms this attributional). Secondly, enterprise is defined 'functionally', as the ability to set up and run projects. He argues that the functional definition is **vocational** and aimed at enabling people to set up and run projects, which are normally small businesses. The second definition is **educational** and aimed at developing particular competences for life. (Johnson 1988, p.62) He goes on to suggest that:

*" everyone has some enterprise, but unfortunately the general level is low." (Johnson 1987, p.x)*

Johnson clearly believes that these key attributes can be developed and he has devised a pack of teaching materials to facilitate the process, (Key Skills, Johnson et al., 1987) which has been purchased by over 70% of secondary schools in Britain. (Johnson 1989-cited in Coffield 1990)

Coffield, however, is particularly critical of their theoretical base and suggests that the materials:

*"... find their academic justification in Alan Gibb's monograph on Enterprise Culture - Its Meaning and Implications for Education and Training (1987) He claims that there are at least twelve entrepreneurial attributes but no argument is advanced to explain why these particular twelve have been chosen." (Coffield 1990, p.64)*

Gibb himself has conceded that not all twelve attributes are measurable and evidence of their association with particular forms of behaviour is at present, weak. (Gibb 1987, p.7)

He has cited the work of psychologists such as, McClelland and Rotter to support his concept of enterprise. They have identified three underlying motives for the development of entrepreneurship, which are known as, the Need of Achievement (nAch), the Need for Affiliation (nAff) and the Need for Power (nPow). Unfortunately, what the work of McClelland and Rotter lacked, is any evidence of a link between individual personality traits and the unitary concept of enterprise. (Kilby 1971, p.19)

Some economists have also challenged the basic premise of McClelland's work. Schatz, whilst acknowledging that McClelland's work has been highly influential, goes on to detail five criticisms of the hypothesis regarding the relationship between n'Ach and economic growth. These relate to:

- the data McClelland chose to emphasize in his study
- the way in which McClelland used the data
- the assumption of a causal relationship between n'Ach and subsequent rapid economic growth
- the arguments used by McClelland that the deficiencies and the unreliability of his samples make his results more (not less) convincing
- the conflict between his findings and those generally accepted in those countries he has worked. (Schatz 1971, pp.185-190)

Robinson, Huefner and Hunt (1991), citing the work of Sexton and Bowman (1986), also questioned the use of stable characteristics of entrepreneurs.

*"Based on this research it appears that students and non-students (entrepreneurs, potential entrepreneurs and new entrepreneurs) differ on a variety of characteristics which are supposed to be stable across time and situations according to personality theory." (Robinson, Huefner & Hunt, 1991)*

Robinson (et al.) believe that the criticisms of the models used by McClelland, based on personality or stable trait paradigm in entrepreneurial research could

be corrected through the use of attitude models and their associated assumptions. (Robinson et al., p.43)

Despite the theoretical minefield associated with the concept of entrepreneurship, those working in the field of enterprise education generally accept Gibb's assertion that there is a range of skills and attributes which are not innate and can be developed through educational programmes. What is more, they can be utilised in areas other than business, such as self help and community programmes. (Crompton 1990, p.16)

The separation of enterprise activities into, enterprise training and enterprise education does enable teachers to take a much broader view of enterprise across the secondary school curriculum.

*"Implicit in Johnson's definition of enterprise education and training is the view that the latter may be relevant for a minority of our young people, whereas the former has educational benefits for all participants. Put more simply, educational programmes which aim to develop broad enterprising attributes provide a firm basis for enterprise training, but the reverse is not necessarily the case." (Crompton 1990, p. 17)*

The analysis illustrates a useful division between 'product' and 'process' which has become important in the development of enterprise education.

*"With enterprise education the process can be content-laden (education about enterprise), process driven (education through enterprise) or occupationally orientated (education for enterprise) and the products respectively will be people better informed about business, more enterprising people and better prepared entrepreneurs," (Johnson 1988)*

From my description of enterprise so far, one may gain the impression that it is about providing development training for potential Alan Sugars and Richard Bransons. About setting up and running business. Certainly, developing new ideas and generating wealth from developing them is an important aspect of enterprise. But there are numerous way of displaying enterprise without money being the prime motive, as in the case of Bob Geldof, who raised mil-

lions for others, but actually lost money himself in doing so. If therefore we are to accept Johnson's premise that we all have some enterprise, we have to recognise and value enterprise in a variety of contexts.

Jamieson suggests that one of the key aims of enterprise is to move people from a state of dependency to independence. (Jamieson 1987) This is reflected in economic terms by the importance attached to the growth of small businesses, by the growth in self employment and in the development of the flexible firm, that is, a firm with a core of highly paid staff complemented by a number of sub-contractors, fixed term employees and part time staff. All of these organisations need enterprise and the need for enterprise in the large organisation has been recognised by the term, intrapreneur:

*"The intrapreneur is someone within an existing organisation, in the private, public or voluntary sector, who does enterprising things." (Johnson 1988, p.61)*

Ball (Undated, p.3) finds the definition of 'enterprise culture' based on 'those who are doing their own entrepreneurial thing, having control over it and profiting from their efforts', unacceptable. Largely because it creates:

*"Divisions between, the haves and have nots, between those who enjoy the enterprise culture and those deemed to be in the dependency culture." (Ball, Undated, p. 1)*

Enterprise education has recognised the role of education in facilitating the change from student dependence on teachers as providers, to a position where they are encouraged to become independent learners.

*"Thus programmes tend to use a variety of contexts which are utilised as a medium for setting pupils tasks which will provide a platform for the application and development of enterprising attributes. In some cases this will be 'industry', in others 'community' and, in others, individual settings. For this reason enterprise education can be found in a variety of curriculum contexts reflecting the generic nature of enterprise skills (problem solving, creativity, decision making); it involves working with others (team work and the ability to recognise the contribution of others are both important to successful enterprises); and they have access to a range of resources, both human and physical, which they can mobilise to complete their task. Such a learning process requires that teachers adopt a facilitative and student centred approach in the classroom. The broad*

*aim of enterprise education can be defined as developing 'enterprise capability' in young people, the ability to apply enterprising skills in a range of contexts. (Crompton 1990, p.18)*

Sir Christopher Ball (1992) argues that many of the country's best known entrepreneurs learned from experience rather than by formal education and stressed the need to ensure that schools provide a satisfying quality experience for young people which encourages them to continue with their education beyond the statutory age.

Many large companies (Ford, Rover and Rank Xerox) have also supported initiatives to provide support, which enables their employees to continue learning. The Ford scheme encompasses leisure, health, skill training and education. The scheme seems to generate a more cohesive work force, one which works better together. (Ball, 1992)

Colin Ball summarised his notion of an enterprise culture for the future in the following way:

*" In all three of the key aspects of life (social, economic and political), and areas of current change , it boils down to this: enterprise means a change in the balance of power, a need to develop and use our human potential, all of it, to the full. To do this we need to enable people to gain the knowledge, skills and enterprising qualities they need if they are to gain dignity, and satisfaction from their lives, and if they are to contribute to the social cohesion and economic competitiveness of society." (Ball, undated, p.3)*

There have been a number of problems encountered by organisations within the schools/industry movement when they have attempted to facilitate such objectives in schools owing to a general lack of awareness of, and insight into, the need for this broader view of enterprise education. Those who take curriculum initiatives are the 'educational intrapreneurs', the staff who are proactive and responsive to the needs of clients or 'stake holders'. (Francis, 1991p. 22,; Crompton 1990)

Many teachers lack the confidence to operate in a facilitative style. (Brandes & Ginnis 1986 pp. 9-11) Schools have found it difficult to provide suitable time during the normal routine school day for enterprise activities and, not surprisingly, it has been difficult to evaluate the outcomes of such activities. (Jamieson 1985 p.8) Additionally, there has been some resistance from teachers who see enterprise education being very narrowly defined and used as a political expedient to turn out teenage self employed. (Johnson, 1988 p.61; Rees 1988, p. 20)

There is little doubt that during the 1980s the Government clearly saw enterprise education as a useful vehicle to encourage an expansion in the numbers of small businesses in the country by young school leavers;

*"Given that self-sufficiency (of the economic rather than the home grown variety) is a major strand of the New Right ideology, it is not surprising to find that the DES, the DE and the Manpower Services Commission (MSC) are increasingly flagging the self employed option to young unemployed and that some of the 'red tape' for entrepreneurs is being removed." (Rees 1988, p. 9)*

However, as we have seen, different and more politically neutral interpretations of enterprise education exist, (Law 1983 p.2) and there is no reason why enterprise education using the broader interpretation, should not develop as many entrepreneurs, than one which takes a narrow business orientated approach. The broader approach also has the additional benefit of providing an 'enterprise entitlement' for all pupils, of enhancing the enterprise skills for all pupils.

Whatever the underlying objectives, there can be no doubt that enterprise education is perceived by the government as a useful vehicle to encourage young people to generate more small businesses and to generate a more enterprising cohort of potential employees.

*"The first view argues that our economic difficulties would be solved if only more people were willing to establish enterprises. ... The alternative interpretation is that everyone*

*will need to be more enterprising in order to cope with our changing society." (Crompton 1987 p.9)*

Although there has been a variety of activities undertaken under the auspices of enterprise education, the most common activity found in schools has involved students running some form of mini- enterprise company. (Hitchcock 1988, p.170) This is perhaps not surprising, for as Jamieson suggests:

*"What better way of achieving congruence between schools and industry than by mirroring industry in school by setting up a mini-company?" (Jamieson 1985)*

Crompton also added that it was a useful mechanism to enable schools to adopt more active teaching styles which would help prepare students for the world of work.

Johnson (1988) however suggests that despite the considerable activity to promote enterprise education from the schools/industry movement, it has hardly scratched the surface. For although the Mini-Enterprise in Schools Project (MESP) estimate that 70% of secondary and middle schools now participate in some form of enterprise education, within these schools, a large number of teaching staff remain unaware of its existence or implications. (DES/Welsh Office Statistics - reported in Crompton 1990, p.19)

*"If we are to bring about this enterprise culture, it is clear that we are going to have to encourage our schools to adopt the new education. Introducing activities such as mini-enterprises into schools can contribute to this process." (Crompton 1987 p.9)*

The debate about the place and effectiveness of enterprise in schools continues, particularly as it receives little direct mention in the National Curriculum, core and foundation programmes, only being highlighted in a cross-curriculum theme. As Coffield suggests:-

*"For ten years now the enterprise culture has been the centre of the political stage in Britain .... The massive resources that have been spent on this project could have been invested in other ways; in British manufacturing industry, in regional development and, in*



*a comprehensive national plan to create dynamic interactions between education, vocational training and employment." (Coffield 1990, p.76)*

Rees agrees that the generation of an enterprise culture during the 1980s has not met the government expectations, but suggests that the infra-structure that has been created, such as the numerous advisory agencies and mini-enterprises in schools, will continue. (Rees, 1988, p.20)

### **Models of Enterprise - Mini-Enterprise Companies**

Setting up a mini-company or mini-enterprise, has been one of the most popular ways of presenting enterprise to pupils in schools during the past decade, as has been discussed in the previous section. There are however, several different models commonly used by schools.

The schools/industry movement evolved a number of approaches to help schools set up mini-enterprise companies. A mini-enterprise company has been defined as, a project run by the students themselves:

*"... in which they raise finance, and create a product or provide a service which they sell, either in school(or college) or outside. In all respects the pupils organise their own business; they will keep their own accounts, try to make a profit and eventually wind up the business." (City of Manchester Education Committee, Guidelines for School Based Business, Manchester - cited in IFAPLAN 1986, p.17)*

The initial market leader was the Young Enterprise organisation, founded in this country in 1963 and based on a scheme in the USA known as Junior Achiever.

The scheme was designed to provide students between 15 and 19, who might be 'potential managers', with an elementary working knowledge of the organisation, methods and practice of commerce and industry through first hand involvement. (Young Enterprise, 1990) Students met after school, for approximately two hours per week and were guided by industrial advisers. In the

early years of the scheme the sessions were usually held on industrial premises. Now 40% are held in school and form part of the school curriculum. (Young Enterprise 1990) The companies raised their capital by selling shares and used this to finance the manufacture of products or the organisation of services to sell to the public. Companies are usually wound-up after approximately eight months.

Although no two Young Enterprise companies are ever quite the same, they offer a standard formula for learning about enterprise. Indeed, there is sufficient standardisation to enable the Young Enterprise organisation to offer an examination for its 'Young Achievers' (Halliday 1983). The scheme produces a 'Company Kit' which contains materials required to register and run the company and provides students with a large company model of business organisation and a well organised infrastructure of support.

To date 280,000 students have participated in Young Enterprise, 28,000 of them during 1989 - 90, when 18,000 offered themselves for examination. (Young Enterprise 1990) The aims of Young Enterprise have changed subtly during its 26 year existence. Initially the emphasis was on understanding the nature of large companies and gaining a practical business experience. These aims have now been extended to helping:

*"... students develop initiative and confidence, widen their knowledge of teamwork and improve their powers of leadership." (Young Enterprise, 1990)*

It has been suggested that Young Enterprise was one of the first advocates of experiential education for secondary school pupils in this country (Hitchcock 1988) and the organisation has also placed great emphasis on reality, rather than simulation, through the use of the 'company kit', opportunities to work with adults other than teachers (AOTs) and the use of industrial premises. Certainly the nature of the Young Enterprise experience has changed since its

introduction into this country, but its emphasis on practices such as, raising capital from selling shares, and pyramid structures of management, predominantly found in large companies, makes the experience some what artificial for most students.

The Mini-company (mini-co) model was pioneered by the EC Transition from School to Working Life projects in Shannon and Strathclyde. It was an attempt to broaden the Young Enterprise principle to include less able students in Years 10 and 11, ie. aged 14 - 16, and to integrate the work into the school curriculum. This development was important because it:

*"... entailed a view that education for enterprise is for every pupil, not just those who are potential managers." (Jamieson 1984, p.20)*

The approach of Mini-co was similar to that pioneered by Young Enterprise in that a mini-co kit was produced (Bray 1984), but it differed in that it provided opportunities for students to operate small scale business structures, for example, sole trader, partnerships and co-operatives. What it lacked, however, was the organised support from local industrialists which was inherent in the Young Enterprise scheme. This made the success of the mini-enterprise using the materials far more dependent on the quality and enthusiasm of the teacher. Consequently the nature of the experience for students in different schools, varied considerably.

A similar set of materials were produced in 1983, by the Durham University Business School (DUBS) which provided an alternative kit supporting schools wishing to participate in mini-enterprise activities. The materials were based on the 'start-up process' of a small firm and established a framework based on:

*"... Asking Questions, Finding Ideas, Making plans and Producing results." (Education for Enterprise, cited in Harris 1990 p.31)*

The kit is available for two age groups, 14-16 and 16-19 and places emphasis on students owning their ideas and the resulting project.

Whilst both the Mini-co and DUBS approach provide useful opportunities for students to develop their enterprise skills, and have great learning potential, the lack of input from local industrialists has been viewed as a potential weakness. Evidence from mini-companies in Ireland and from the Young Enterprise organisation suggests that:

*"... the most successful companies are those which have been given the most help from industrial advisers. (Weir 1982)" (Jamieson et al. 1988, p76)*

Usually, such assistance was not available locally and consequently running a mini-enterprise for the first time was often traumatic for teachers, because it represented a considerable departure from 'normal' teaching activities and many were developing their enterprise skills at the same time as their students. (Crompton 1987) In such situations, the availability of a set of teaching materials presented a useful 'crutch' for teachers to lean on and an early evaluation reported:

*"Pupils are very responsible and motivated in their work. They learn a great deal about basic economics, profitability, balance sheets etc., which have a wide application to their work as adults. Immediate bonuses are increased confidence and responsibility, an ability to handle decisions, argue points, make judgements, work as a team. The pupils I spoke to seemed to have a clear understanding of the terminology (eg. stocks, supplies, profits, capital, overheads, budgeting etc.) and to handle adequately such skills as minute writing, drawing up an agenda, ordering and invoicing etc. Their skills in handling personal relationships, eg. speaking at meetings, accepting majority decisions, negotiating etc. were very marked. They spoke to adults with confidence and respect, even low ability children spoke clearly and fluently. The project improved enterprise, entrepreneurial skills and skills relevant to employment." Bray, 1983 pp. 137/8)*

Since 1984, enterprise education in schools has developed largely through the work of the Mini-Enterprise in Schools Project (MESP), which has developed a support network which includes several universities, a number of large businesses, and local education authorities. (Crompton 1990, p.6) This network

has provided training opportunities for teachers and disseminated information about developments in the field of enterprise education and has:

*"... encouraged schools to develop their own form of mini-enterprises in conjunction with members of the local community." (Jamieson et. al., 1988 p.77)*

In association with a national bank, it has also been able to provide a small grant to enable schools to establish their mini-enterprise companies.

Mini-enterprises are not without critics. During 1988-9 H.M. Inspectors visited 60 primary and secondary schools in England and criticised a number of points. In primary schools they suggested:

*"The issue of appropriateness had been discussed during teacher preparation in only a few schools. A number of activities seen were not wholly appropriate to the age and maturity of the pupils involved and in some cases too extensive a range of concepts and business practices were being introduced. There was a danger of teachers ignoring the possibilities of progressive development in economics and industrial understanding in the secondary years and cluttering primary classrooms with a multitude of adult concerns. In particular the use of profit as the sole criterion to judge success or failure of an enterprise is inappropriate." (HMI 1990, pp. 5/6)*

HMI recognised that students of all ages enjoyed their mini-enterprise experience but questioned whether it was the most cost effective way of approaching industry related topics. They recognised the value of mini-enterprises in the development of a range of social and communication skills but found that the range of design and making skills used were often low level and the products produced inferior to comparable commercially made products. More seriously, they suggested that the products offered by students were sold to customers who felt they had to be less discriminating than they normally would be. Consequently, students were getting a false impression of the market place.

Wragg (1990) has been critical of both the quality of product and the realism of mini-enterprise in schools. Jamieson foresaw this criticism and argued that

increased realism may be over-demanding for pupils and achieved only at the expense of loss of pupil autonomy and that this in turn could damage student motivation. (Jamieson, 1984 p.22/3)

In secondary schools, HMI found that students displayed a good general knowledge of business practice and of the most widely used business terms. However:

*"Comparatively few were able to relate the knowledge to the wider dimensions of economic activity. Only a few were aware of the 'protected' nature of their market or the full costs of production - for example, the real cost to the entrepreneur of premises." (HMI, 1990 p.12)*

Whilst a similar study by HMI in Welsh schools (1988) was more positive about the enterprise activities observed, it suggested:

*"Sometimes too much is expected, in terms of producing ideas, planning a campaign, solving problems and making decisions, of pupils who have had little opportunity in other aspects of their education to take initiatives, be active participants or show leadership; in such cases interest flags at the slightest difficulty and there is a distinct lack of drive and motivation." (HMI, 1988)*

Once again, HMI concluded that enterprise activities were useful at developing social skills and broadening students' general education.

The thrust of HMI criticisms is that mini-enterprise is not addressing the central issues of enterprise as it relates to business and economic and industrial understanding. In short, they are supportive of a narrow, restricted view of enterprise, rather than one that emphasises the development of enterprise skills for all as argued by Ball and Jamieson. (op. cit)

Does the restrictive view of enterprise used by the government and HMI actually reflect the view of industry? Crompton suggests that it does so only in part. He argues that many industrialists support a curriculum model which is; process driven, pupil-centred, utilises teacher/facilitators, emphasises knowing

how (rather than, knowing that), enables pupils to work in small groups, encourages collaboration, is active and generative, expects pupil independence, provides flexible lessons, is negotiated, encourages pupils to learn from mistakes, gives pupils wide discretion, utilises profiles, emphasises local needs, is presented by cross-curricular teaching teams and attempts to put theory into practice. (Crompton 1990, p22/3) Many employers and employer organisations are becoming more direct about their expectations of education and it is their views which will be considered in the next section.

### **The Skills, Attitudes and Knowledge Businesses Really Want Their Employees To Have**

The last section attempted to illustrate some of the government initiatives introduced since the 'Great Debate' in an attempt to ensure that education was more in tune with the needs of industry and developed the 'enterprise' skills needed by industry. Some educationalists felt that these initiatives were an inappropriate preparation for the world of work and failed to provide students with a more general, liberal education. (Holt 1990, Bailey 1992)

The practice in recent years of comparing the UK with other European countries, has continued to sharpen the debate as preparations were made for full integration into Europe at the end of 1992. As national boundaries are eroded, the labour force will become more mobile. Johnson (1990) suggests that young people in this country will be disadvantaged by their own low expectations and a government which is content to allow only a modest number of students to attain higher levels of education. He concludes that the lack of a well educated work force will make it difficult for companies in Britain to compete in European markets, and for our citizens to apply for jobs in other countries.

Sir John Cassells is equally critical:

*"The evidence suggests that British companies have a lower demand for skilled workers than their international counterparts. Faced with a less trained workforce, UK firms will then tend to choose less skill intensive methods of production and less skill intensive products. Unfortunately these tend to have a lower market potential." (Cassells - cited in Sofer 1988)*

Sir Graham Hills certainly support the view that the education system in this country has major deficiencies and believes that the government has yet to address the real education and training needs of manufacturing industry in this country.

*"In strong contrast to other countries, the output of our educational system is roughly of two kinds: the 70% who abandon it as soon as they can and the remaining 30% likely to contain the country's future leaders. Unfortunately, this 30% does not contain enough engineers, technologists and other skilled practitioners to sustain Britain's industrial recovery." (Hills 1989)*

Clearly the problem of providing suitable education and training in this country to prepare young people for the world of work has been clearly identified for some time, but creating a structure to address the problem has been somewhat illusive.

In 1977 a group of educationalists, industrialists and other interested parties came together to try and probe the shortcomings of the British educational system. They joined forces with the RSA (The Royal Society for the encouragement of Arts, Manufacturers and Commerce) to establish a 'Education for Capability' campaign. (RSA undated) This began with a series of lectures in 1978/9, through the publication of a manifesto and a series of projects which continued throughout the 1980s. The main aims of the campaign were described as follows:

*"The RSA's Education for Capability campaign has sought a fundamental change in education and training to help people to become effective as well as knowledgeable. Education for capability combines cultivation and comprehension - the traditional academic aims of education - with the capacities to cope, be competent, to be creative and to co-operate with others. It helps people to use as well as gain knowledge and to make things happen as well as understand and analyse events. It equips people for a chang*



*ing world in which they will have to learn throughout life rather than being given packets of knowledge intended to last for a lifetime." (RSA, p. 2)*

Many educationalists supporting the campaign identified three familiar and specific impediments to progress, the academic tradition, the examination system and what was described as a false distinction between general and vocational education. (Tomlinson, cited in RSA document) On these three criteria, the project cannot be judged an unqualified success, for even after eleven years of the campaign the academic tradition is still strong, and whilst examinations have been reformed at the pre 16 level, the 'A' level is still much as it was a decade ago. There is currently an acceptance at governmental level of the need for parity between academic and vocational qualifications, but the distinction between academic and vocational activities still continues in practice. (DES 1991, pp. 24-27)

The campaign did however influence several initiatives during the 1980s including, records of achievement, the National Curriculum, TVEI, the development of vocational qualifications, and the development of educational business partnerships. RSA has followed up its Education for Capability campaign with a new initiative, 'Profitable Learning' (RSA 1992) which will be discussed later.

Perhaps one of the most comprehensive responses from industry was the report from the CBI Task Force in 1988, the 'Cadbury Report'. This task force conducted a survey both amongst its members and schools and found:

*".. the expectation of the partners (business and schools) in respect of what children needed to learn at school were broadly in line." (Cadbury Report 1988, p. 11)*

Furthermore, the task force established that business had four main requirements which it catalogued under, knowledge, relevant skills, positive attitudes of the pupils, and sound management of schools. (Cadbury Report 1988, p.19)

In terms of the knowledge required by industry, the report suggested that every child should have the opportunity to learn about, mathematics, science, language and the humanities. In addition to the subjects detailed in the National Curriculum there was a desire to see the inclusion of some form of economic understanding and work experience to show how value is added and the national wealth created.

The task force recognised the problem of specifying specific skills to be taught in schools. However, it did consider that all students should leave schools with the following competences:

- Communications skills - the ability to transmit and receive instructions and information effectively. All school-leavers should be able to read and write English clearly and grammatically. They should also have an understanding of at least one other European language.
- Numerical skills - school-leavers should understand and be able to apply to the solution of everyday problems at least the concepts of addition, subtraction, multiplication, division, length, breadth, height and volume using both imperial and metric systems.
- Screen and keyboard skills - which are of growing importance in most occupations. Young people should increasingly have sufficient understanding of, and confidence, using both screen and keyboard to be able to adapt to using different machines in different contexts.
- Interpersonal and life skills - necessary to creating a happy work place, an efficient team and social harmony.
- Problem solving skills - the ability to spot a problem, to define it and then to apply existing knowledge and understanding to its solutions.

The report supported the view that schools should encourage students to view education as a process of continual self development. Education and training, it suggested should not be seen as something that is 'done to' young people. Rather, it should be viewed as a continuing investment by the individual, in the form of time and effort, if not cash.

The latter point implies that young people should be encouraged to leave school or college with positive attitudes both to their own development and to the world of work which they join. These attitudes will include:

- a positive attitude to change
- a positive attitude to self reliance
- a positive attitude to work - which recognises that work is found in places other than just the work place and provides an opportunity to contribute towards the immediate family and the wider community.
- a positive attitude to sharing and co-operating with others

Perhaps the most interesting of the expectations detailed in the report, was the call for sound management in education. The view expressed was that business contributed £9 billion a year through taxation towards local government of which approximately half was spent on education, and that it could therefore expect schools to respond to the objective of a 'high-pay, high-productivity work force'. The report argued that schools must have the resources necessary to provide sound education, but it pointed to examples of schools wasting their resources. The Audit Commission pointed out examples of schools having unfilled places which resulted in the provision of excessive heating, lighting, cleaning and staff to teach, in effect, empty desks.

There were a few other 'suggestions' in the document which are pertinent to the present study, the most obvious being the identification of the need to encourage enterprise.

*"The spirit of enterprise is one of the key qualities that business expects of education and in one sense all the links in which pupils or teachers are invited to participate will encourage it." (Cadbury Report 1988, p.41)*

The report, despite its protestations, clearly expects education to propagate the aims of a narrowly defined enterprise culture. It went on to suggest that

two schemes were particularly useful in encouraging entrepreneurial skills, Young Enterprise and Mini-Enterprise. However, in terms of the usefulness of all possible initiatives by business in Schools/Industry work, schools rated involvement in some form of mini-enterprise the fifth most effective form of link, behind community projects with business, joint problem solving projects and equipment financing. (Cadbury Report 1988, p.45) This may reflect individual company's more narrow view of their specific needs, rather than the global needs of the country as a whole and the realisation of the importance of the individual.

In a separate study, Forbes and Miller (1988) appeared to be conscious of this distinction when they analysed the needs of industry and matched these against the new Government initiatives. They wrote:

*"We are not suggesting that the only function of the educational system is to prepare people for a work role, although employers are often accused of taking this view-point. This must however be one of the main functions of any education system, particularly if 'work role' is defined as a role which gives a personal sense of productivity and contribution to the community." (Forbes & Miller 1988, p.32)*

They suggested that as the demands on the work role change so the educational system needs to be flexible enough to change with it. The two major changes they felt faced the educational system were, the way it was structured and managed, and the way in which it assessed pupils progress during their education.

They see 'traditional education' as being structured by a belief that students learn best when they are presented with facts, information and knowledge from which arguments can be deduced, theories can be proved and experiments can be structured. They consider that such a view discounted the learner as an individual and ignored the fact that each individual has different needs and expectations. They suggest therefore that the biggest challenge

facing education is to redress the balance between the academic tradition and the needs of the individual.

Forbes and Miller suggest that personnel managers are the 'Gate Keepers' of industry and as such they should press education not only for better academic qualifications, but also to ensure that students have access to the following:

- Experiential learning and opportunities to learn how to learn
- Topics which enable them to develop the ability to integrate, manipulate and apply knowledge through 'areas of study' rather than through narrow subjects.
- Assignments and projects that encourage them to acquire the skills of marshalling and ordering complexity.
- Situations which enable them to develop the ability to attend to, and facilitate the process of self-understanding and the skills of interaction.

By citing these demands, Forbes and Miller seem to be echoing the message of the RSA in that they are arguing for a more realistic context for students' learning, one which will enable them to relate their academic studies to the activities of business.

In addition to these demands they also suggest that the assessments used will also need modification. Whilst they recognise GCE, 'A' level and a first degree are excellent methods of assessing the recall of facts and the ability to organise them in a clear, logical and reasoned argument, such methods would be inappropriate for the demands listed above. Assessment in these areas would require methods such as profiling, records of achievement, project based assignments and peer/self assessments, (Forbes and Miller 1988, p.36) as they require a formative record of pupil development in a range of activities, rather than a summative statement.

An examination of the 'demands' made by Forbes and Miller suggests that developments such as, TVEI, CPVE and the General Certificate of Secondary Education (GCSE), have made a considerable contribution to the changes they see as being necessary to prepare young people for the world of work. They are particularly critical however of the Education Reform Act 1988, which places stress on a subject-centred curricula for 80% of teaching time in schools.

*"Subject-centred curricula promote subject specialists, who often do not see the opportunities for encouraging inter-disciplinary approaches. Teachers might become more inward-looking, and less amenable to alternative approaches to teaching and learning - the very last thing that is required at this time from the education service." (Forbes & Miller 1988, p.36)*

The implications of the 'demands' being made by the 'Gate Keepers', are clearly of some importance in the context of the present study, as many of them are central to the mini-enterprise experience, in particular, and to the work related curriculum in general.

Many companies, large and small, have participated in various activities in some form of schools/industry partnership, but British Petroleum (BP) has been a pioneer in this respect. During the past decade it has published its policy towards, and its expectations of, education in a series of booklets. (Marsden 1988; Marsden & Priestland 1989; Marsden 1991) Marsden (1991) has suggested that both education and industry has a 'bottom line'. (represented by a vertical 'X' column) In industry it is the output, the sale of products or services, in education it suggests the bottom line is examination results.

*"A business is driven hard by its bottom line.... any business person will tell you that a positive bottom line is essential for survival and that its immediate achievements must dominate concerns; longer term considerations must take second place." (Marsden 1988, p.2)*

They go on to suggest that the businesses that ignore the longer term aspects, (represented by a horizontal 'Y' column) such as, the environment, training, equal opportunities, educational links etc. do so at their peril, for these aspects have an equal bearing on the long term overall performance as does the more immediate concern with profit.

Many aspects of business performance are challenged by students as part of their studies within the educational system. (Environmental issues for example) Marsden suggests that education has never had its 'bottom line' questioned in a similar manner. Examination results ('X' column) are used as an indicator of performance, but those companies that have become more intimately involved in educational links have become equally concerned with the more cross-curricular concerns ('Y' column) such as communication skills, work attitudes, technological capability, industrial understanding and economic awareness.

*"As employers have become better informed through working with schools and better able to articulate their human resource needs in terms that schools can understand, a much clearer message on getting the right balance between 'X' and 'Y' has emerged."*  
(Marsden 1988 p.3)

Marsden goes on to suggest that education is beginning to influence business, in that astute employers are now beginning to realise that the myopic pursuit of the short-term bottom line may not be attractive to new recruits. As employers become increasingly concerned with the 'demographic time-bomb' (CBI Task Force Report 1988 p.12) the concern for:

*"... the 'horizontal' outputs are clearly important ... and industry must make sure that it offers these."* (Marsden 1988 p.3)

Marsden's analysis appears somewhat dated in that parents, (some parents more than others perhaps) have always judged schools by the results they appear to achieve with their off-spring. For example they judge their son or

daughter's ability to read, whether or not they pass the 11 + , and their examination results at GCSE and 'A' level. More recently schools have expressed interest in using the notion of 'Value Added', that is, the improvement made in a range of areas including social development as well as academic and vocational attainments, to illustrate their effectiveness. (McPherson, 1992)

However, BP has taken a very broad view of promoting the enterprise culture and has taken an active part in the promotion of Schools/Industry partnerships, particularly in communities near its operating plants. It has participated in work experience, work shadowing, work/school or college enterprises, simulations and site visits, by using its personnel in schools both working with students and as school governors. It has also assisted in promoting numerous other school-specific projects through its 'BP Challenge' scheme.

BP, as a company, does not see the benefits as a gain for their business or education. For, if the concept of 'partnership' is to be meaningful, the benefits have to be for all concerned. However, within the partnership context, it views the long term benefits of its work as producing:

- a thriving economy
- informed citizens
- young people better prepared for the adult world
- increased pupil confidence and motivation
- new capabilities and skills
- the development of new teaching and learning styles
- pupils with an increased understanding of industry.

Despite the obvious advantages to school/business partnerships they still only establish a limited link between students in school and business. A CBI sur-



vey by Allen & Hamilton (cited in Teachers' Weekly 3.10.88) found that 54% of businesses and 37% of schools surveyed had no regular link, nor were the bulk of students involved, the proportion being at best 1 in 5.

The survey indicated that schools and business had different objectives. The headteachers stated that their aims for the links were to:

- broaden students educational experience
- to give students an understanding of business
- to provide businesses with an understanding of schools
- to enhance students long term employability.

Businesses stated that they established links to:

- improve the schools' attitude towards business
- provide teachers with an understanding of business
- improve the firm's profile in the community
- help students choose their career.

The firms stated that 80% of the links established were successful and 16% very successful. Schools felt that 71% of their contacts were quite successful and 23% were very successful.

The survey revealed that establishing links takes time and many companies and schools stated that this prevented them from becoming involved in such projects. (Allen & Hamilton - cited in Teachers Weekly 3/10/88)

During the past few years, the CBI (1992), RSA (1992) and the Institute of Economic and Social Research (Prais et al. 1991) have highlighted the need to establish clear educational targets to ensure that young people in this country

can compete with their counterparts both in Europe and elsewhere in the world. In 1989 the CBI suggested:

*"A quantum leap is needed in Britain's educational and training performance. To maintain and improve Britain's position in an increasingly competitive world, nothing short of a skills revolution is required. Action is urgently needed. (CBI, 1989)*

The targets and timescales set by various organisations, (CBI, RSA, Institute of Directors, IoD) differ marginally, but the expectations are nevertheless clear. By the year 2002 everyone should continue in full-time or part-time education until the age of 18 and everyone should reach the equivalent of the National Vocational Qualification (NVQ 3, which is currently BTEC National or GCE 'A' level (or Scottish equivalent) during the course of their working lives. (RSA 1992, p.6) The most recent summary is provided by the government's National Education and Training Targets (1992)

The CBI report recognises that their vision of the future is dependant on individuals adopting a more positive attitude towards education.

*"Cultural change is critical and the targets provide the required challenge for the nation". (CBI 1992, p. 7)*

The report supports the need to minimise the divide between vocational and academic qualifications, suggesting that the difference is less important than the fact that individuals attain suitable qualifications for the world of work as it will be in the future. It suggests that for too long vocational qualifications have been given lower status than academic qualifications and have failed to provide continued progression to further education.

In their document World Class Targets, the CBI have omitted any direct reference to enterprise or an enterprise culture, instead they point to the need for a 'Learning Culture' where individuals are encouraged to continue the process

of education and training throughout their lives. (CBI 1992, p.10) It suggests that:

*"It is as important to develop broad based skills as it is to achieve higher level skills, especially in the case of young people at the foundation stage. This target is qualitative. It requires that in both education and training, curriculum and qualifications design embraces the need for a full range of core skills in communication, personal effectiveness, problem solving, numeracy, technology and language. In a workplace setting employers are looking for employees who are able to do their current jobs, adaptable to changing roles and aware of their contribution to the total business." (CBI 1992, pp 9-10)*

The CBI in this document are reiterating some of the points made in the Task Force report (1988) but the emphasis is clearly on education about, and through enterprise. Certainly there is the expectation that young people will be more enterprising, but not necessarily that they will use their skills to set up small businesses. This appears to be an obvious difference in the objectives of business from that of the Conservative government.

The CBI also seems to be keen to develop the notion of education and training as a partnership between the individual, the employer and government, each having a contribution to make and each a share in the ultimate benefits that a well trained better educated work force will bring to the country.

The emphasis on the individual is echoed by the Institute of directors (IoD 1992)

*"... what is needed in a market economy is independent minded individuals who have the greatest possible personal stake in their own futures and who can perform to their full potential.*

*A system of education and training which is largely designed with the interests of producers in mind is unlikely to create such individuals; the system must therefore be made more responsive to the needs of its consumers." (IoD 1992, p.4)*

Both CBI and IoD agree that there needs to be parity between vocational and academic qualifications. The IoD however goes much further than CBI in that it suggests that there is a need for sound home/school partnerships, and a

comprehensive record of achievement (ROA). It supports the introduction of the National Curriculum and in particular the cross curricular themes such as Economic and Industrial Understanding and Careers work.

The RSA in its most recent initiative, 'Profitable Learning' (RSA 1992) reports three major findings of their extensive consultation and discussion with employers and educators:

- that learning does indeed pay
- that we have in the past seriously underestimated the human potential for learning
- that effective financial incentives for the providers of education and training (schools, colleges, polytechnics, universities and employers) are the key to change.

RSA have examined the methods of education and training in many parts of Europe and the developed world and concluded that there are no ready made solutions which are applicable to this country. They suggest:

*"There is a pernicious 'conspiracy' in our society between ideas of human potential, assumptions about employment need, provision for education and training and the motivation of young and mature people to learn. The success of good schools and colleges, of the Open University and the polytechnics, of employment initiatives like the Ford Employee Development and Assistance Programme or the Rover Learning Business, and of the current expansion of higher education demonstrates what is possible." (RSA 1992, p. 5)*

The thrust of the documents from CBI, RSA and IoD is to stress the importance of education and training to the future prosperity of industry in this country and the need to recognise the need for higher standards of education and encourage persuade individuals that they will benefit from participation in a life-long programme of education.

The notion of partnership between business and the individual employee has obvious implications for the present study. For a true partnership to emerge,

there has to be a recognition of the needs of business by the individual as well as a need for business to view education and training as an investment rather than a cost. (Morgan 1990 - cited in IoD 1992) This has, in part, been recognised by the introduction of Economic and Industrial Understanding (EIU) as a National Curriculum, cross-curricular theme. The National Curriculum Council, in its guidance to schools number 4 on EIU suggests:

*"There are many aspects of industry and the economy, such as business, commerce, finance, and consumer affairs. Provision for EIU should reflect this variety. It should be broad, ranging widely over issues as diverse as industrial relations and the nature of enterprise." (NCC 1990, p.3)*

The document suggests that EIU should be as much about the development of the student's personal and social development, as it is about developing their skills, attitudes and knowledge relating to business and industry. (NCC 1990 p.1) NCC 4 (EIU) and subsequent documents NCC 1992, offer a number of suggested approaches which enable EIU to be delivered in various subjects, (NCC 4 1990, p.9) but the use of a mini-enterprise (NCC4 1990, p.44) has been frequently used as a method of delivery for EIU in both primary and secondary phases of education. As Williamson reported:

*"The unique contribution of mini-enterprise work was that it allowed pupils to connect various discrete experiences from their wider schooling and apply to a practical situation knowledge acquired from both formal schooling and broader contexts." (Williamson 1989, p.80)*

Mini-enterprise has been to date, one of education's major contributions to the development of students' knowledge about the work of business and industry. The research project detailed in the following sections, attempts to establish the nature of the contribution of mini-enterprise to students' knowledge, attitudes and skills.

## Summary

The past two sections have presented a picture of an ailing industrial nation coupled with an educational system which is failing to meet the needs of industry. A system which, either lacks the will, or the inclination, to respond to industrial and commercial demands, by providing skilled recruits capable of helping British companies to reverse the position and compete with a high skill/high value added economy in international markets. The counter claim seems to suggest that whilst the Government purports to favour a high skill/high value added economy capable of maintaining its international trading position, it has in fact encouraged the development of an educational system which is more likely to encourage the development of the opposite.

Recent comparisons made with competing countries both in Europe, and world wide, suggest that they favour a different approach and that this may well be more successful in creating the type of economy favoured by the British government. (Ashton 1992)

The five criticisms of the educational system related to preparing students for the world of work outlined in the previous chapter, tend to fall into two broad categories. Those that relate to the development of prejudicial attitudes toward industry and those that relate to the lack of skills and knowledge required to enable students to work in a modern industrial society.

The preceding sections have detailed some of the attempts that have been made to address these problem in secondary schools. The present government has introduced a number of initiatives aimed at raising the profile of vocational education and training, improving the image of industry in the eyes of both student and teachers, and making students more enterprising. These have included, TVEI, Compacts, Youth Opportunity Programmes, Youth Train-

ing Schemes, City Technology Colleges, National Vocational Qualifications, Training and Enterprise Councils and Mini-Enterprise in Schools.

All have been internally evaluated but it is difficult to determine the effectiveness of one initiative compared with another largely because the evaluations focus on process, rather than products or outcomes. Mini-enterprise is an exception to this rule, but even here, local interpretation and the lack of clear objective, makes evaluation of its effectiveness extremely difficult. Is the objective to increase students' understanding of company organisation, or to encourage students to start up their own small companies? Or is it to provide a context which would promote the development of the knowledge and skills required to enable students to work effectively in the UK industries of the future?

Given this background of uncertainty and industry's general dissatisfaction with education's role in 'preparing' students for the world of work, it is easy to see the general attraction of mini-enterprise to teachers working in the primary and secondary phases of education, for it seems to address so many of the issues concerning both the government and business.

Just how effective mini-enterprise is as a educational model in this context, is still an unanswered question, and the purpose of the present investigation. The next section outlines the nature of research activities undertaken to ascertain the value of the activity, for both students and schools.

## CHAPTER 3

### Statement of the Scope and Aims of the Investigation

In this section, a number of ideas and reactions to the use of mini-enterprise companies in schools will be discussed to draw out some significant questions which provide a focus for the current investigation.

Jamieson suggests that the idea of the mini-enterprise company has been,

*".. seized upon ...(by schools) because it is a concrete way of doing something about enterprise." (Jamieson, 1984)*

Certainly mini-enterprise companies have been very popular (with both students and teachers) and a number of writers have suggested a number of positive outcomes as a result of student participation. Jamieson (et al.) for example, have suggested that student participation in mini-enterprise companies has helped to improve, motivation, knowledge and a range of social skills associated with their work in school.

There have been a number of suggestions as to the apparent success of mini-enterprise companies in these areas:

- The novelty of the approach
- The novelty of the material
- The type of learning involved
- The role of the teacher
- The link between the activities undertaken in school and those undertaken in the world of work
- The opportunity to make money
- The students relationships with adults



- The organisation of the working day (Jamieson et al. 1988; IFAPLAN, 1986)

Every school has a different approach to mini-enterprise which is dependant on the students, staff and resources available. Consequently, the degree of success enjoyed by participating students in terms of improvements in their economic awareness, 'enterprise' skills and their attitudes towards certain working practices, may be due to a complex combination of many of these and other factors. Jamieson has summarised the above and suggested four main reasons for the success of mini-enterprises in schools:

- students involved are active - students are doing something, there is feverish activity to get the show on the road, and whilst active learning is not the cure for everything, we should have more of it in schools
- students have a great deal of autonomy, they are in charge of themselves and have a degree of independence
- students are encourage to work in groups and consequently there is a lot of peer pressure and help/cajoling to ensure performance
- students are provided with a focused task, with a clear target which is recognisable and related to the 'real' world' of work. (Jamieson 1987)

Certainly the success, or otherwise, of mini-enterprises is dependant on the mix of a number of inter-related factors which are detailed below.

### **The Organisation of the Working Day**

Handy suggests that the way in which schools organise themselves creates a block which prevents students from participating in activities which would foster enterprise.

*"What employer would give his or her employees up to ten different bosses per week, in ten different locations, with perhaps five different working groups; would prohibit the discussion of collaboration (called cheating); and would then interrupt each task after 35 minutes? " (Handy - in Watts & Moran, 1984 p.8)*

Mini-Enterprise companies have provided an opportunity for schools to establish different organisational structures for student learning. They sometimes operate outside the normal school day, in the evening and at lunchtime or both. On other occasions, schools suspend the normal timetable to enable mini-enterprises to operate for a year group or even occasionally, for the whole school. What is more, unlike normal lessons, they actively encourage group work and close collaboration between students for extended periods of time.

### **The Novelty of Approach/Type of Learning Involved**

The Schools/Industry movement, largely through SCIP, has emphasised a process rather than content approach to the work-related curriculum. The mini-enterprise company provides students with an opportunity actively to participate in the running of a company, and this certainly enables the students to encounter many of the problems which challenge commercial concerns in the community.

Jamieson has outlined a number of issues relating to the degree of 'realism' embodied in mini-enterprise companies, suggesting that it may be neither possible, nor desirable truly to reflect a company operating in the local community, either in school or a work preparation unit, typically, an industrial unit set up to simulate the operation of a small business. (Jamieson 1985, p.211-2) Certainly establishing criteria to ascertain the degree of realism is fraught with difficulty, for within a particular mini-company certain elements may be close to reality and others less so. The length of time the mini-company is in operation may also change the operating parameters and in doing so effect the reality of the enterprise.

Jamieson also suggests that many teachers assume that:

*"... the more real the experience, the more motivated young people will be to take part and perform well. Furthermore, it is assumed not only that this greater motivation will assist learning but that learning will be more relevant (to the student) because it takes place in a realistic setting." (Jamieson 1985, p.212)*

Mini-enterprises tend to be very public examples of schools in action and this can militate against teachers allowing students full ownership of their mini-enterprise. Paradoxically, any lack of student ownership, of opportunities to learn from mistakes, can detract from certain learning outcomes.

Perhaps the most important feature of the mini-company for students and the element which adds a dimension of the world of work, is that they are involved with real money. This fact alone does not make their experience real, but if the company is responsible for money and contracts to deliver goods or services beyond the immediate environs of the school or college, perhaps in competition with companies in the local community, then:

*"... it has left the world of the school and entered the economic market place." (Jamieson, 1985)*

Many mini-enterprise companies spend a great deal of time trying to create new products or services and whilst it might be a laudable educational objective, it does not necessarily contribute to the realism of the mini-enterprise experience. For in industry and commerce, numerous companies are sub-contracted to produce goods and services where the parameters of manufacture and operations are precisely pre-determined.

However the students' previous experience, both from school and beyond can contribute to their enterprise experience. They tend to exercise more control over the project than they do with other aspects of their school work, generally using their teachers as consultants. An evaluation of the Mini-enterprise in Schools Project stated;

*"The mini-enterprise experience ... stood out from familiar and conventional teaching and learning styles. Hence its impact." (Jamieson, Hunt, Richardson, Williamson, 1988)*

## **The Role of the Teacher**

The active/experiential learning approach central to mini-enterprise, represents a change in the role of the teacher, from a controlling and motivating role to a facilitating and supporting one.

*"They (mini-enterprises) provide pupils and teachers with alternative ways of learning by placing less emphasis on the didactic style of teaching and giving more opportunities for pupils to become actively involved in shaping and directing their own experience." (Smith, 1986 p.7)*

Whilst mini-enterprise companies are not the only example of teachers using active and experiential styles of learning, they are also used in aspects of personal and social education (PSE - see Brandes & Ginnis 1986, 1990) it is perhaps the most common and the most widespread.

## **The Link Between the Activities Undertaken in School and those Undertaken in the World of Work**

Jamieson and Lightfoot (1982) suggest that employers are not so much concerned, about potential employees, formal qualifications and knowledge, than their attitudes towards work and the workplace. This cluster of attitudes includes the disciplines of the work place and a range of 'life and social skills', such as working with others rather than working for oneself, cooperating with others and of being self motivated.

## **The Opportunity to Make Money**

Most mini-enterprise companies set out with the intention of making a profit and this helps to give the activity a sense of realism. It has already been suggested that, in some cases, it may also provides a major motivation for the par-

ticipating students, who respond in a radically different way to the work they do in their other school activities. (Handy - in Watts & Moran, 1983) Many people, both educationalists and others, are critical of this aspect of mini-enterprise. They view the activity of making money as alien to education, as supporting a political objective associated with 'the enterprise culture'. Consequently the introduction of mini-enterprise was opposed by certain Local Education Authorities, (LEAs) such as ILEA, who modified their approach to mini-enterprise and created a 'Team Business Cooperative'.

### **The Novelty of Material**

Mini-enterprise activities have tended to be unusual, although not unique, in that they encourage students to use their knowledge and skills to solve problems related to the world of work. The context of student activity provides opportunities for experiential as well as academic learning to be utilised, which in turn enables students to draw on a whole range of subject expertise and previous experience not necessarily gained during their formal education.

### **The Students' Relationship with Adults**

The Young Enterprise model has the use of Adults Other than Teachers (AOTs) 'built in' to its structure and the other models encourage the use of AOTs when possible. These adults bring a range of industrial and commercial experience which is available to students on request. The relationship between the AOT and the student is different from that between teacher and student. It tends to be less formal than the teacher/student relationship, more a consultant/client relationship.

It is clear that there are certain expectations associated with the operation of a mini-enterprise company in school, from the Government, the business community and from the schools and teachers. All have invested time, money and

expertise to ensure that some form of mini-enterprise can be established in every school.

There is no shortage of claims concerning the benefits of student participation in mini-enterprise companies. Some of these can be substantiated by the experience of many years, others may be clarified at some point in the future.

The purpose of the present investigation is, to establish what participation in a mini-enterprise company contributes to students' knowledge about, and attitudes towards, business. The investigation should also establish whether students participating in mini-enterprise companies use skills they have acquired from, various subject areas and situations outside of school and whether the experience enables them to develop new skills. This will be achieved by enquiries made before and after their involvement and the outcomes will be compared with students who do not have such an experience.

The investigation will examine student knowledge, skills and attitudes, seeking to establish:

- what knowledge, skills and attitudes are developed during a mini-enterprise activity.
- whether young people are capable of understanding the complexities of running a business.
- why so many students seem to be so highly motivated when they participate in a mini-enterprise activity.
- why so many students seem to enjoy participating in a mini-enterprise
- whether or not students working with others cultivate the ability to recognise the contribution of all the team members.
- whether students act responsibly towards other members of their mini-enterprise.

It will examine the learning processes involved during a mini-enterprise experience and seek to establish:

- what factors (if any) contribute to the learning process during a mini-enterprise activity.
- the significance of the context of the mini-enterprise activity to the success of student learning.
- whether or not mini-enterprise enables students to take greater responsibility for their own learning.

Finally, it will examine the contribution made by contextual factors associated with mini-enterprise and seek to establish:

- whether students draw on a range of human and physical resources, both within the school or college and within the wider community, in the context of their mini-enterprise.

Although mini-enterprise companies have been established in infant and primary schools, (Cotton & Douglas, 1990) the current investigation was restricted to approximately 350 students aged between 9 and 18, from twenty schools as detailed in the following section.

## **Working Hypotheses**

The following working hypotheses were formulated based on the above data.

These will be used to provide a focus for the investigation:-

- Students prefer active/experiential opportunities to didactic approaches when learning about business.
- Specific activities in school or college which simulate activities found in the world of work, help to increase student motivation in a range of different subjects.
- The application of concepts and knowledge in work simulations helps students to see the relevance of other subjects they study in school.

- Students have a clear sense of ownership of their learning when they participate in mini-enterprise activities.
- Peer group pressure acts as a powerful incentive to student learning and aids achievement.
- The different student/teacher relationship which operates during a mini-enterprise helps to promote students' self discipline.

## Research Methods

There are several research paradigms used to investigate the significant questions, some provide an particular emphasis on the individual, others attempt to establish rules to explain human behaviour. (Cohen & Manion, 1989) If one views social interactions in the same way as the physical world, as though they were a 'hard, external and objective reality', then:

*"... the scientific investigation will be directed at analysing the relationships and regularities between selected factors in that world. It will be predominantly quantitative "*  
(Cohen & Manion, 1989 p.8)

The important features when utilising this approach are, the identification and measurement of the concepts being investigated and the underlying themes operating. (Burrell & Morgan, 1979) Such an approach is often referred to as 'nomothetic'.

An alternative view of social reality stresses the importance of the subjective experience of individuals and the way in which they create, modify and interpret the world in which they find themselves. This approach adopts a qualitative as well as a quantitative aspect. In this paradigm the focus is on the explanation and understanding of:

*"... what is unique and particular to the individual rather than what is of general interest."*  
(Burrell & Morgan, 1979)

This approach to understanding individual behaviour is termed idiographic.



The problem with idiographic approaches is that they tend to be very time consuming, it is usually difficult to establish the typicality of data and if external factors are found to be influencing the object of study, it is difficult, if not impossible to include them in the investigation. (Wilson 1984, p.31) Perhaps the most damning criticism of such studies is that they tend to be difficult to replicate. Consequently, the use of approaches in this paradigm would be inappropriate for the present study because of the difficulty of relating the findings to other work in the field.

Consequently, it was decided to work using nomothetic methods and one of the most common forms of data collection used in this paradigm is some form of survey, conducted either by questionnaire or interview. This is no doubt because:

*"An interviewer (or a well designed self completion questionnaire ) can elicit information from a respondent which covers a long period of activity yet can be summarised in answer to a question in a few minutes." (Wilson 1984, p.35)*

The survey method is often combined with some form of 'experiment' and there was an opportunity within the present context to conduct a simple form of 'experiment' by questioning students about their knowledge, skills and attitudes before and after their mini-enterprise experience. The difficulty of establishing what is cause and what is effect, is not underestimated, but the existence of a 'control' group (described later) helps limit certain of these ambiguities.

The reliability of an experimental approach could be enhanced by the use of several methods of data collection. Wilson suggests:

*"Other things being equal, an interviewer-administered survey is to be preferred on the grounds of accuracy." (Wilson 1984, p.33)*

Therefore the combination of a self-completion questionnaire, followed up by some form of interview would provide a wide range of data. These could be contextualised by the use of observational techniques which would enable students to base their responses on their recorded actions.

Unfortunately, there are certain disadvantages connected with the survey method. No questionnaire, or personal interview is ever neutral. The example of the political orientation of 'enterprise', (Law, 1983) discussed earlier illustrates this point. It is also difficult for the students to indicate the quality, or intensity of their responses to questions, either in a questionnaire or personal interview. However, the use of a progressively more personal approach, questionnaire, to semi-structured interview, to discussion based on recorded video data, should help to minimise this particular shortcoming.

## **CHAPTER 4**

### **A Description of the Sample and the Procedures Used in the Study**

#### **The Design of the Study**

Perhaps the most obvious way of confirming what students learn, and their feelings about the work undertaken when participating in a mini-enterprise activity, is to ask them. The validity of this approach however, is suspect, because it assumes that the students both know and understand what they have learned and where the learning took place. Further more, it would be difficult for students to disentangle what they learnt during a mini-enterprise from their previous experience. Therefore, to avoid simply collecting anecdotal information and to establish an element of 'triangulation by method', the enquiry needed to be more accurately focused and it was decided to organise this in three phases.

- A survey of the opinions of those with an interest in, and knowledge of mini-enterprise.
- A questionnaire to be completed by students before and after a mini-enterprise experience based on data from the original survey.
- A collection of semi-structured interviews to enlarge on the findings of the questionnaire results. Some of these interviews would be focused on a video recording of the student activities during their mini-company experience.

The research was structured so that each phase became an integral part of the next. The survey established the content of the questionnaire and ensured that it had a measure of 'face' and 'construct' validity. The questionnaire would in turn provide key points which provided the basis of a semi-structured interview with students.

## The Survey

Despite the fact that various types of mini-enterprise companies are used in schools (Jamieson et al 1985 pp. 205-6) as a way of promoting 'enterprise', there has still been relatively little research conducted to establish the elements which contribute to the knowledge, skills and attitudes of students which emerged through participation in such activities. Therefore, the first part of the enquiry attempted to establish what were the commonly held beliefs about the value of these activities.

Material was collated from three sources:-

- A review of the relevant literature, including a review of back numbers of SCIP News
- A review of published data for mini-enterprise workshop activities held for teachers
- A survey of the opinions of a number of industrialists, bankers, teachers and of other educationalists involved in enterprise education in schools, trade unionists and a sample of students who had participated in a mini-enterprise activity.

The School Council Industry Project (SCIP) now The School Curriculum Industry Partnership, is a project which has been in the forefront of developing materials and teaching methodologies, which enable schools to relate to the work of industry and commerce. SCIP News, its quarterly publication, has been documenting examples of various enterprise activities for the past 10 years, although early editions of were only printed in limited numbers. Some of the more recent examples of these reports were examined for details of changes in the knowledge, skills and attitudes, claimed to have been found in participating students. (SCIP News numbers 12-25 1985-1990) These were logged under the three general headings, (changes in) Knowledge, Skills and Attitudes. (Appendix 1)

Teachers attending SCIP mini-enterprise training courses were invited to suggest the knowledge, skills and attitudes which they felt could be developed during a mini-enterprise activity. Their suggestions were reported in course evaluation documents. (SCIP, 1986 pp. 13-22) (SCIP, 1987 pp. 31-35) (Appendix 2)

The approach was extended in this enquiry by a survey, either by a personal approach or by letter, in which contributions were solicited from local industrialists, bankers, SCIP Co-ordinators, union representatives, teachers and students who had experience of mini-enterprise. (Appendix 3)

The purpose of the enquiry was outlined and each contributor was asked what they felt were the key skills involved in running a mini-enterprise; what knowledge they believed could be gained by participating students; and how their attitudes were changed during the experience. Respondents were free to record their views in any way they wished. The results varied, both in style and the length of the response. Most were in the form of key words or phrases, one was a detailed narrative. The approach used to elicit a response from students had to be slightly more structured and their responses varied, from a detailed but virtually illegible report, to a sheet of highlighted key words or phrases.

In all, over 80 different contributions were received as detailed in Table 1. This represented approximately 85% of the requests made. Unfortunately, certain groups responded better than others, only two out of ten trade union representatives responded for example. This was almost certainly because few trade unions have full time personnel with time to work with students in schools, but perhaps also because those that did, had little experience of work related to mini-enterprise companies.

Once received, each response was analysed and key words or phrases identified and tabulated. For example, one SCIP co-ordinator suggested:

*"Punctuality, both to meetings and to keeping deadlines".*

The key words extrapolated from this statement were: 'Punctuality' (An example of an attitude - if it was their own company, did it matter whether they were late or not?)(see Appendix 3) and 'Meeting Deadlines' (In one sense this could be seen as an extension of punctuality - delivering goods on time, in another way, it was a skill, that of establishing how long certain tasks would take and therefore establishing realistic delivery targets). In the case of a response which simply stated 'Team Building', the statement was used in its entirety.

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TABLE 1

**Numbers of people contributing to the initial survey about the knowledge, skills and attitudes developed by students participating in mini-enterprises in schools.**

n = 81

Industrialists	13
Bankers	6
SCIP Co-ordinators	7
Trades Union Reps.	2
Pupils who had taken part in Enterprise activities	53

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This was not a strictly representative sample, but since the objective was to gain as broad a view as possible, and all contributions added to the picture of the experience mini-enterprise companies gave to participating students, this was not considered to be unduely damaging.

This procedure thus established widely held views as to the key areas of knowledge, the key skills and attitudes that were developed by students participating in a mini-enterprise activity. The results of the survey confirm many

of the findings of similar previous surveys detailed in chapter two, for example, Forbes & Miller (1988).

## **The Questionnaire**

Each of the key areas were 'targeted' by a series of questions and a bank of over 400 such questions was produced. The questionnaire was then constructed to ensure that, on completion, each student would be asked for his or her view about each of the concepts identified in the initial survey. (See Appendix 9) Each question was then carefully considered and judged for its suitability in terms of, content, vocabulary, interest and possible ambiguity.

This task was performed by a panel of 'judges' which included, a teacher experienced in the field of enterprise education, a SCIP Co-ordinator and an Industrialist. The panel provided a cross-section of opinion from people with considerable experience in working with students participating in various forms of mini-enterprise.

They were asked to examine the bank of questions and to identify any which they felt to be inappropriate for the reasons outlined above. They were also asked to indicate whether or not they felt the questions were valid means of establishing individual students' knowledge, skills and attitudes in the areas being addressed. (Appendix 9)

An initial attempt was made to construct a questionnaire which would be suitable for secondary school students with a wide range of reading ability, by the use of graphics, photographs or diagrams, as well as direct questions. However it quickly became clear that this would make the questionnaire confusing and virtually impossible to administer. Attempts to make it accessible to the poor reader, or the student of limited ability would make it dull to the average, or above average student. It was therefore decided to write the questionnaire

for use across the whole spectrum of ability likely to be encountered in a comprehensive school, although the language used would be more appropriate for students of average and above average ability as defined by staff within each school. The protocols accompanying the questionnaire enabled it to be used with students with a wide range of ability, as it allowed students to ask for clarification about any question during the completion session.

Two different formats were used in the questionnaire. In the first (A), a Likert type scale was used. A statement was presented to the students who were asked to record whether they, Strongly Agree, Tend to Agree, Disagree, or Strongly Disagree. Four categories were chosen to ensure students registered agreement or disagreement and did not simply play safe and opt for a category in between.

eg. "Adults tend not to take my ideas seriously because I am at school."  
I, Strongly Agree/Tend to Agree/Disagree/Strongly Disagree

In the second (B) format, students were presented with an initial statement, followed by four related statements and they were invited to suggest which of the second batch of statements in their opinion best matched the first, which was the second best fit, and so on. The responses obtained from the students, whilst less clearly delineated than those obtained from the type A questions, were nevertheless valuable because they recorded student responses to related issues without repetitive questioning. It was felt that this format would help to maintain student interest and motivation whilst completing the questionnaire. (see, Youngman, in Bell et al. 1984, pp.157-169)

eg. "Some companies encourage their employees to work as a team because:

- (a) It overcomes the individual's weakness
- (b) It produces more useful ideas
- (c) It prevents unhealthy competition within the company
- (d) It enables the boss to have more control over his/her employees



A sample questionnaire (Appendix 4) was constructed and administered to 32 students, male and female. Teachers were asked to select students who would be typically in each of three broad categories, those of average general intellectual ability, those with below average general intellectual ability, and those with above average general intellectual ability, aged between 11 and 17 years, in preference to a screening test of some kind. The justification for this approach is offered by Denton and Postlethwaite.

*" It could be reasonably expected that a teacher would know the pupils as individuals on a wide appropriate set of subject-specific criteria, and provide the sort of evidence that group tests cannot easily produce in a normal school. " (Denton & Postlethwaite, 1985 p.52)*

The below average group did not contain students who had severe reading difficulties but it was felt that less able student would be able to participate if they could call on the assistance of their teacher when they found difficulty in understanding aspects of the questionnaire. (see Appendix 5, p.43)

The questionnaire responses were analysed to establish whether or not certain questions had failed to evoke a different response from different students on the first and second occasions. A small number of questions elicited the same response from virtually every student in the pilot sample. If all students were responding in the same way to certain questions, there seemed little point in continuing to include them, as the answer was a foregone conclusion. It was therefore decided that these questions would either be modified, or eliminated completely from the questionnaire. (Youngman 1984, p.172) This process left 50 questions of the first type (A) and 20 of the second type (B) in the questionnaire. (Appendix 5)

The new questionnaire was then given to a similar group of students (32) on two occasions approximately one month apart. The responses elicited from students participating in the second pilot on the two occasions were then

correlated using a Pearson correlation coefficient. The analysis was made to establish the reliability of the questions to elicit the same response from students over a period of time. The results were most encouraging producing high correlations (lowest  $P = .5206$ ) and very high correlations in most cases ( $P = 1.0$ ). (Appendix 8)

### **Student Sample**

'Internal validity' of the investigation was addressed by establishing a 'Control Group' of students. That is, a group of students in the same year group as the students participating in the mini-enterprise, from the same school, who were not involved in a mini-enterprise company. This group represented approximately 10% of the total sample. The students in the control group were also selected using the same three ability groupings, from below average, average and above average in general intellectual ability (as defined by their teachers (detailed above) and of both genders (where applicable, some schools were single sex). This group was matched where possible within each of the twenty sample schools using the following variables:- age, gender, type of school, location of school and general ability. Where such matching within the same school was not possible, (2 schools in the sample) a control group of students from a 'matched' school of the same type was used. Students in these control groups were selected by location, age, ability and gender to ensure as close a match as possible with the 'enterprise group'. By comparing the results obtained from the students participating in a mini-enterprise, with those of fellow students not involved with the activity, before and after the mini-enterprise activity, it was hoped to indicate changes in knowledge, attitudes and skills in the mini-enterprise group, which were not indicated by other students.

A sample of schools which were planning to develop mini-enterprise companies during the eighteen month period, from September 1990 until December 1991, during which the research was planned, were approached. Initially this was done using a general notice on an educational electronic mail network (Times Network) and by personal contacts made through the Mini-Enterprise in Schools Project (MESP) and the SCIP network. All offers of assistance were followed up and details of the project together with an outline of required student involvement, were sent to schools. At this point some schools felt that they were not able to help by administering the questionnaire because of various logistical constraints. However, some of these schools did facilitate interviews with groups of students (detailed later).

The process of recruiting schools to participate in the research described in the previous paragraph, enabled a 'Dimensional Sample' to be established. (Cohen & Manion 1990, p. 103) 'External Validity' was then addressed by selecting schools from four counties in the south of England which were either middle or secondary schools largely in the maintained sector, to enable the desired age profile to be obtained. Using schools from different counties across a large geographical area provided data from sources subject to numerous external influences. Whereas school selected from one county may all have been influenced by a particular initiative, or a particular adviser working within the county boundaries.

Twenty of the original schools which responded to the request for assistance with the project agreed to take an active part and contact was established with the Headteacher as well as the appropriate member(s) of staff, prior to the administration of the questionnaire.

The schools included middle schools, comprehensive schools, grammar schools, secondary modern schools, sixth form colleges and one independent

**TABLE 2**

% of Students (n = 345) (from 20 schools of Various Types) Included in the Sample

Middle Schools	22%
Grammar Schools	3%
Secondary Modern Schools	0.5%
Comprehensive Schools 11-16	45%
Comprehensive Schools 11-18	18%
Comprehensive Schools 12-16	9%
Sixth Form Colleges	3.5%

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school.) They were located in urban, rural and semi-rural areas (Table 2). The schools were asked to provide the information about students as outlined above to help with later analysis.

Students participating in the project were required to complete a pre and post mini-enterprise questionnaire. It was also necessary to follow-up the questionnaire by conducting a semi-structured interview with some of the students during the next part of the research to see whether the whole process was reliable. At the end of the second part of the research, 424 (ie. 345 + 79 in the Control Group) (+ 32 in pilot) students from twenty schools or colleges were eventually able to complete both questionnaires.

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**TABLE 3**

(n = 345) (from 20 schools)

% of Students in Various Types of Location

Rural Location	10%
Semi-Rural Location	36%
Urban Location	54%

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## Statistical Analysis of Questionnaire Data

To enable a comparison of the pre and post mini-enterprise data collected from the questionnaires, responses had to be coded. In part one of the questionnaire, the responses were coded 1 for Strongly Agree (SA), 2 for Tend to Agree (A), 3 for Disagree (TD) and 4 for Strongly Disagree (D).\*

In part 2, (the 'B' questions) of the questionnaire, each of the four statements were coded 1 for a first choice, 2 for a second etc. In this way the students were able to record, their strength of feeling relating to certain issues, or level of economic understanding. The analysis of the data relating to the second group of questions (the 'B' questions) was less clear cut than that of the former group (the 'A' questions). Although students indicated their preferred choice, there was no clear distinction between the 1,2,3 and 4th categories. However, as particular attention had been given to the relevance and validity of the content of questions used in all parts of the questionnaire, changes in the students' extreme responses, that is, their first and last choices, were of particular interest in the present study. This format provided a broad sweep approach to the questionnaire survey and enabled a wide range of related data to be considered by participating students. (Youngman, in Bell et al., 1984, p.160; & Cohen & Manion 1989, p.317)

These codes were tabulated along with the other general information about school, location, size etc. and fed into a computer programme for statistical analysis. The programme used for the analysis was Special Program for the Social Sciences, SPSS(x). By using SPSS(x) it was possible to establish a Pearson product-moment correlation between:

- Each student's responses before starting a mini-enterprise and on completion of the experience.

- The responses of the students taking part in the enterprise experience and the control group at each of the above stages

It was therefore possible to establish if there had been any significant changes in the responses given by the students who had taken part in a mini-enterprise experience compared with the control group.

The strength of the correlation figure given by SPSS(X) is expressed as a number from +1.0 to -1.0.

*"A negative coefficient means that when one variable is higher in value, the other variable tends to be lower in value. A positive coefficient means that, when one variable is higher, the other variable tends to be higher." (Medderson, 1987)*

Whilst changes in response from the first completion of the questionnaire to the second may have been due to random factors unrelated to the mini-enterprise experience, the comparison between the 'Mini-enterprise' group and the control group ensures the internal validity of the data collected. Furthermore, to ensure that the results gained from the questionnaire were representative and not skewed by student sensitivity to the questions being asked in the questionnaire, a form of triangulation by method was established by a follow up semi-structured interview with a sample of participating students. This involved establishing a response from students using more than one method of data collection .

### **The Semi-Structured Interview**

Semi-structured interviews were conducted in ten schools identified as schools A to J. (see Table 4) To gain a student perspective of work during a mini-enterprise it was desirable to conduct interviews without the teacher being present. This was a sensitive area and therefore, when teachers responded to the initial request for assistance, a description of the research and its aims was sent to the school. If the teacher involved agreed in principle to a

student interview session, a formal request for student involvement was sent to the headteacher. This usually resulted in a personal interview between the member of staff involved, the researcher and the headteacher, although on one occasion, the discussion took place on the telephone.

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#### **CHART 4**

##### **PROFILE OF SCHOOLS CONTRIBUTING TO SEMI-STRUCTURED STUDENT INTERVIEWS**

School A	An 11-16 mixed comprehensive school, in a semi-rural country town with 1300 students on role. (A Y.E. Company, 20 students interviewed)
School B	A 12-16 mixed comprehensive school, located in a semi-rural catchment area, with 750 students on role. (A Y.E. Company, 8 Students interviewed)
School C	An 8-13 mixed middle school in a semi-rural location, with 550 students on role. (A mini-enterprise (ME) Company, 15 students interviewed)
School D	An 8-13 mixed middle school located in a rural market town with 480 students on role. (A ME Company, 12 students interviewed)
School E	An 11-18 mixed comprehensive school in an urban area, with 1100 students on role. (A ME Company, 12 students interviewed)
School F	An 11-18 mixed comprehensive upper school located in a semi-rural town, with 1200 students on role. (A ME Company, 10 Students Interviewed)
School G	An 11-18 girls comprehensive school in an urban area with 1400 students on role. (A ME Company, 30 students interviewed)
School H	An 12-16 mixed comprehensive school in a semi-urban area, with 700 students on role. (A ME Company, 9 students interviewed)
School I	An 8-13 mixed middle school in a rural area, with 500 students on role. (A ME Company, 12 Students interviewed)
School J	A 16-18 mixed sixth form college located in an urban area with 600 students on role. (A ME Company, 14 Students interviewed)

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All interviews were based on the same set of questions (Appendix 10) which was sent to the headteacher and the teacher concerned, prior to the com-

mencement of student interviews. It was explained that confidentiality for all concerned would be respected and consequently, specific feedback on interviews with students, would not be possible, but each school would receive a copy of the research findings when the project had been concluded.

Teachers were advised that the nature of semi-structured interviews of this kind, often resulted in the generation of follow-up questions which expanded the original set of questions. Each school was given a categorical assurance that no school, individual pupil or teacher would be identified, other than by type, age of student and broad location (ie. rural, semi-rural, urban).

The students were normally interviewed in groups of between six and ten, although in one case a whole tutor group was present with nominated spoke persons to respond to most of the questions. In each case, the coordinating teacher attempted to ensure that the interview groups had a representative sample of the participating mini-enterprise students, so that there was a gender balance, and students of differing abilities, reflecting the situation that existed during the operation of the mini-enterprise company.

At the beginning of each interview, students were given a brief description of the research and its purpose. Their permission was requested for the interview to be taped on the understanding that the contents of the tape would not be revealed to any third party, including their teacher(s). All of the students agree and the interviews were recorded on audio tape and transcribed in full. (eg. Appendix, 7(a) & 7(b))

The interviews with students and their teachers served two purposes. First, to enlarge on the data gleaned from the questionnaire, second, to help establish the validity of the questionnaire data.



The questionnaire focused on a relatively large number of students who had participated in a mini-enterprise experience. Whilst this gave a breadth to the investigation it was important to ensure that the responses given bore some relationship to the students' actual experience. Therefore, to provide depth to the investigation, the semi-structured interviews were conducted with ten groups of students, approximately 120 students in number, who had recently completed a mini-enterprise activity. Ideally, it would have been useful to follow up the questionnaire with a semi-structured interview with all students. This however was not possible owing to the time required and the dependence on the goodwill of both students and participating schools. To complete both the questionnaire and the semi-structured interview required at least two hours, and a minimum of two visits.

Therefore, several schools which, for some reason or other were unable to complete the questionnaire, did facilitate an interview session with students. Over fifty percent of the students interviewed had also completed the questionnaire.

To establish a clear picture of what happened during the mini-enterprise which could be discussed during the semi-structured interview, and to ensure student responses were based on concrete experiences, three schools were asked to video tape their work during the course of the enterprise experience. Students were loaned a video recorder, trained in the use of the video equipment and were provided with the necessary videotapes. They were requested to provide examples on videotape of all aspects of the life and work of their mini-enterprise company, to provide an overview and not to dwell on any aspect of the company's work. With that exception, they had complete editorial control of the video produced.

The focus of the other interviews was based on issues which were highlighted in the questionnaires. (eg. Appendix 7a) Students were questioned particularly in areas where strong agreement, or disagreement had been registered in the questionnaire. In the schools where students had video taped their activities, the teachers involved were also interviewed in an attempt to establish a common understanding of the responses given and how they related to the activities that had taken place. (Examples of Transcripts in Appendix 7a and 7b)

\* (NB. There was a printing transcription error in the questionnaire document relating to the part 'A' questions. In the questionnaire protocol (p.43 The three categories were described as, (ST) Strongly Agree, (A) Tend to Agree, (D) Disagree, (SD) Strongly Disagree. At the top of the response columns the categories were transcribed as Strongly Agree (SA), Agree (A), Tend to Disagree (TD) and Disagree (D). Since students were 'talked through' the protocol, and no concerns were reported by teachers, nor observed by the author relating to this transcription error, and since the natural progression from a strong agreement to a strong disagreement was maintained, this was not considered to be problematic to the eventual analysis)

## CHAPTER 5

### Statement of Results

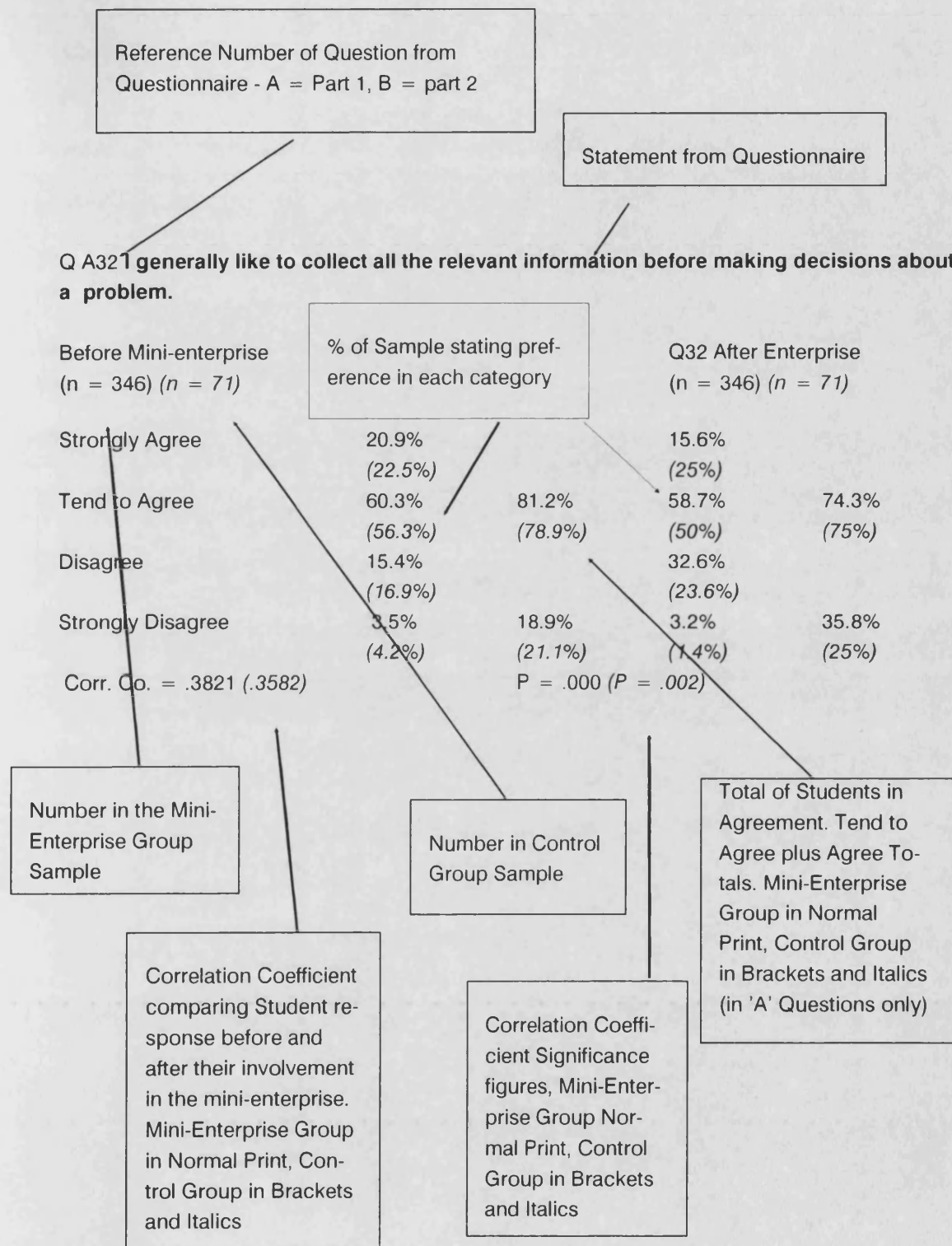
The content of the questionnaire was based on the returns received from the industrialists, bankers, teachers, students, trade unionists etc., as outlined in the previous chapter. Some of the statements suggested were highly specific and related to the respondent's own occupation rather than to what could realistically be expected of students in schools and colleges. Nevertheless, Appendix 3 indicates that there was a considerable measure of agreement about the development of skills, the accumulation of knowledge and the changes in attitude brought about by student involvement in a mini-enterprise, between the various groups involved in the initial survey. This enabled the questions used to focus on specific areas felt to be of importance in mini-enterprise activities and were incorporated in the pilot questionnaire (Appendix 4 & Appendix 9).

A close examination of Appendix 9 indicates that some of the questions do not appear to relate to any specific area identified by the panel of experts. For example, in part 'A' of the questionnaire, question numbers 4,33,45,48 and 50, and in part 'B' question number 16. However, these questions were necessary to ensure a comprehensive presentation of the activities involved in the running of a mini-enterprise, when the questionnaire was presented to students participating in the study. These questions addressed contextual issues relevant to the study and the responses were helpful in building a comprehensive picture of student activities in a mini-enterprise activity when considered in conjunction with student responses in the semi-structured interviews.

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*Data presented in italics within brackets refers to the control group. Data to the right refers to group sub-totals in type 'A' questions, i.e. The group in agreement; Strongly Agree + Tend to Agree, or Disagree + Strongly Disagree (\* see note in chapter 4)*

## Explanation of Data Charts Described in this Section



## Knowledge of Finance

Questions:- A 32. B 13, 15, 19.

Running a mini-enterprise company provided students with an opportunity to learn about the less well known intricacies of managing a company. Students certainly saw running a mini-enterprise as a learning experience:

*" .... it taught us how to be responsible with other people's money. Yes, I think that was the main thing. Being responsible for other people's money, how we were going to work things out and the general responsibility. The organisation of it all." (school F)*

The approach used was quite different to the normal lessons and it sometimes had the added attraction to students of enabling them to make some money. This cluster of questions sought to establish student views on some of the financial aspects of running a company.

Question A32 attempted to investigate whether or not students collected all the relevant information before making decisions about a specific problem. This was thought by the panel to be an essential feature of financial planning.

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**Q A32 I generally like to collect all the relevant information before making decisions about a problem.**

	Before Mini-enterprise (n = 346) (n = 71)		After Enterprise (n = 346) (n = 71)	
Strongly Agree	20.9%		15.6%	
	(22.5%)		(25%)	
Tend to Agree	60.3%	81.2%	58.7%	74.3%
	(56.3%)	(78.8%)	(50%)	(75%)
Disagree	15.4%		32.6%	
	(16.9%)		(23.6%)	
Strongly Disagree	3.5%	18.9%	3.2%	35.8%
	(4.2%)	(21.1%)	(1.4%)	(25%)
Corr. Co. = .3821 (.3582)		P = .000 (P = .002)		

Many students were attracted to the mini-enterprise because it gave them an opportunity to run their own company and control their own finances. Question B13 attempted to establish what students felt was the best way of raising the capital needed to start the business.

---

Question B13 - The best way of raising money to start a business is:-

**To get a loan from the bank**

	Before Mini-enterprise (n = 339) (n = 79)	After Enterprise (n = 339) (n = 79)
1st Choice	44.0% (35.6%)	39.4% (29.8%)
2nd Choice	29% (40%)	31% (36.9%)
3rd Choice	20.2% (21.1%)	21.7% (26.2%)
4th Choice	6.7% (3.3%)	7.8% (7.1%)
Corr. Co. .3167 (.3648)		P = .000 (P = .001)

**To get together with others to share the cost**

	Before Mini-enterprise (n = 340) (n = 79)	After Enterprise (n = 340) (n = 79)
1st Choice	39.3% (40%)	42.5% (37.6%)
2nd Choice	28.4% (32.2%)	29.8% (31.8)
3rd Choice	27% (25.6%)	23.1% (30.6%)
4th Choice	5.3% (2.2%)	4.3% (-)
Corr. Co. = .2788 (.5615)		P = .000 (P = .000)

**To get a government grant**

	Before Mini-enterprise (n = 338) (n = 72)	After Enterprise (n = 338) (n = 72)
1st Choice	13.5% (22.2%)	15.1% (29.2%)
2nd Choice	34.1% (25%)	31.6% (29.2%)
3rd Choice	40.3% (38.9%)	42.3% (31.9%)
4th Choice	12.1% (8.3%)	11% (9.7%)
Corr. Co. = .3479 (.5421)		P = .000 (P = .000)

**To sell some possessions to raise the required capital**

	Before Mini-enterprise (n = 338) (n = 72)	After Enterprise (n = 338) (n = 72)
1st Choice	3.5% (2.8%)	2.9% (2.8%)
2nd Choice	8.2% (2.8%)	7.2% (6.9%)
3rd Choice	12.4% (8.3%)	12.8% (6.9%)
4th Choice	75.9% (86.1%)	77.1% (83.3%)
Corr. Co. = .1497 (.1956)		P = .006 (P = .100)

**SUMMARY - Question B13 - The best way of raising money to start a business is:-**

	Before Mini-enterprise	After Enterprise
<b>To get a loan from the bank</b>		
1st Choice	44.0% (35.6%)	39.4% (29.8%)
<b>To get together with others to share the cost</b>		
1st Choice	39.3% (40%)	42.5% (37.6%)
<b>To get a government grant</b>		
1st Choice	13.5% (22.2%)	15.1% (29.2%)
<b>To sell some possessions to raise the required capital</b>		
1st Choice	3.5% (2.8%)	2.9% (2.8%)

Question B15 was perhaps the most important question in this cluster as it sought to establish student opinions about keeping accurate financial records.

Question B15 It is important to keep accurate financial records:-

**Because it helps plan production**

	Before Mini-enterprise (n = 339) (n = 71)	After Enterprise (n = 339) (n = 71)
1st Choice	23.8% (12.7%)	18% (21.1%)
2nd Choice	18.2% (25.4%)	23.0% (23.9%)
3rd Choice	27% (42.3%)	21.8% (23.9%)
4th Choice	31.1% (19.7%)	37.2% (31%)
Corr. Co. = .2301 (.1246)		P = .000 (P = .301)

**Because it help prepare tax statements**

	Before Mini-enterprise (n = 338) (n = 71)	After Enterprise (n = 338) (n = 71)
1st Choice	31.4% (29.6%)	34.5% (35.2%)
2nd Choice	29.6% (21.1%)	24.3% (15.5%)
3rd Choice	23.5% (25.4%)	22.6% (32.4%)
4th Choice	22% (23.9%)	18.6% (16.9%)
Corr. Co. = .1904 (.1686)		P = .000 (P = .160)

**Because it prevents the company selling products at a loss**

	Before Mini-enterprise (n = 339) (n = 71)	After Enterprise (n = 339) (n = 71)
1st Choice	28.4% (28.2%)	31.4% (23.9%)
2nd Choice	29.6% (25.4%)	30.8% (29.6%)
3rd Choice	30.5% (19.7%)	26.5% (28.2%)
4th Choice	11.4% (26.8%)	11.3% (18.3%)
Corr. Co. = .1498 (.1273)		P = .006 (P = .290)



**Because it helps prevent theft from the company**

Before Mini-enterprise		After Enterprise	
(n = 338) (n = 71)		(n = 338) (n = 71)	
1st Choice	17.0%	16.3%	
	(29.6%)	(19.7%)	
2nd Choice	28.7%	22.4%	
	(28.2%)	(31%)	
3rd Choice	19.0%	29.1%	
	(12.7%)	(14.1%)	
4th Choice	35.4%	32.3%	
	(29.6%)	(35.2%)	
Corr. Co. = .1572 (.1388)		P = .004 (P = .248)	

**SUMMARY - Question B15 It is important to keep accurate financial records:-**

Before Mini-enterprise		After Enterprise
<b>Because it helps plan production</b>		
1st Choice	23.8%	18.0%
	(12.7%)	(21.1%)
<b>Because it help prepare tax statements</b>		
1st Choice	31.4%	34.5%
	(29.6%)	(35.2%)
<b>Because it prevents the company selling products at a loss</b>		
1st Choice	28.4%	31.4%
	(28.2%)	(23.9%)
<b>Because it helps prevent theft from the company</b>		
1st Choice	17.0%	16.3%
	(29.6%)	(19.7%)

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Question B19 attempted to explore students' understanding of the procedures used when obtaining a bank loan.

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Q B19 If a bank lent you some money they would:-

**Ask your parents to guarantee the loan**

Before Mini-enterprise		After Enterprise	
(n = 332) (n = 72)		(n = 332) (n = 72)	
1st Choice	10.7%	13.1%	
	(2.8%)	(4.2%)	
2nd Choice	5.7%	7.0%	
	(9.7%)	(11.1%)	
3rd Choice	14.6%	14.2%	
	(11.1%)	(13.9%)	
4th Choice	68.7%	65.7%	
	(76.4%)	(70.8%)	
Corr. Co. .3164 (-.0129)		P = .000 (P = .914)	

**Ask what you wanted the money for and how you would pay it back**

Before Mini-enterprise		After Enterprise	
(n = 334) (n = 72)		(n = 334) (n = 72)	
1st Choice	60.4%	56.8%	
	(62.5%)	(58.3%)	
2nd Choice	19.9%	21.4%	
	(20.8%)	(12.5%)	
3rd Choice	16.1%	15.4%	
	(12.5%)	(22.2%)	
4th Choice	3.6%	6.4%	
	(4.2%)	(6.9%)	
Corr. Co. = .1773 (.2271)		P = .001 (P = .055)	

**Ask how much you would expect to make in the first year of business**

Before Mini-enterprise		After Enterprise	
(n = 332) (n = 72)		(n = 332) (n = 72)	
1st Choice	10.1%	11.6%	
	(12.5%)	(18.1%)	
2nd Choice	50.1%	47.4%	
	(40.3%)	(48.6%)	
3rd Choice	30.1%	29.4%	
	(38.9%)	(26.4%)	
4th Choice	9.6%	11.6%	
	(8.3%)	(6.9%)	
Corr. Co. = .1559 (.0231)		P = .004 (P = .847)	

Before Mini-enterprise		After Enterprise
<b>Ask to see last years accounts</b>		
(n = 332) (n = 72)		(n = 332) (n = 72)
1st Choice	18.2%	18.3%
	(22.2%)	(19.4%)
2nd Choice	24.8%	24.1%
	(29.2%)	(27.8%)
3rd Choice	38.8%	41.3%
	(37.5%)	(37.5%)
4th Choice	18.2%	16.3%
	(11.1%)	(15.3%)
Corr. Co. = .0920 (.2993)		P = .094 (P = .011)

**SUMMARY - Q B19 If a bank lent you some money they would:-**

Before Mini-enterprise		After Mini-enterprise
<b>Ask your parents to guarantee the loan</b>		
1st Choice	10.7%	13.1%
	(2.8%)	(4.2%)
<b>Ask what you wanted the money for and how you would pay it back</b>		
1st Choice	60.4%	56.8%
	(62.5%)	(58.3%)
<b>Ask how much you would expect to make in the first year of business</b>		
1st Choice	10.1%	11.6%
	(12.5%)	(18.1%)
<b>Ask to see last years accounts</b>		
1st Choice	18.2%	18.3%
	(22.2%)	(19.4%)

## Resource Management Skills

Questions A14, B8, B10, B11 and B17.

It was difficult to identify what the students understood to be 'Resource Management Skills' because of the fragmented way they described their activities. However, it was possible to gain a general impression from the way they describe how they controlled their companies.

" We learnt management skills like trying to keep the same people in the same place at the same time, which was difficult because the school was open and everyone was wandering around. We learnt how to keep people under control which we succeeded in sometimes but not often." (school B)

The cluster included questions on how the company utilised its profits and how it made decisions as well as the way it deployed and controlled its staff.

Q A14 Better decisions are made when the problem is discussed fully before hand.

	Before Mini-enterprise (n = 343) (n = 72)		After Enterprise (n = 343) (n = 72)	
Strongly Agree	36.7%		31%	
	(25%)		(36.1%)	
Tend to Agree	55.9%	92.8%	60.9%	91.9%
	(59.7%)	(84.7%)	(52.8%)	(88.9%)
Disagree	6.7%		7.2%	
	(13.9%)		(9.7%)	
Strongly Disagree	0.6%	7.3%	0.9%	8.1%
	(1.4%)	(15.3%)	(1.4%)	(11.1%)
Corr. Co. = .1863 (.3904)		P = .001 (P = .001)		

Q B8 - The best way of ensuring a successful product or service is:-

To seek the opinions of potential customers before starting production

	Before Mini-enterprise (n = 343) (n = 78)		After Enterprise (n = 343) (n = 78)	
1st Choice	79.1%		79.7	
	(66.7%)		(63.9%)	
2nd Choice	9.6%		10.7	
	(17.8%)		(19.3%)	
3rd Choice	4.3%		4.1%	
	(13.3%)		(12%)	
4th Choice	7.0%		5.5%	
	(2.2%)		(4.8%)	
Corr. Co. = .2305 (.3998)		P = .000 (P = .000)		

**To make sure the product or service is cheap**

(n = 343) (n = 78)

Before Mini-enterprise

(n = 342) (n = 78)

After Enterprise

1st Choice	6.4%	5.2%
	(8.9%)	(7.1%)
2nd Choice	32%	25.8%
	(30%)	(28.6%)
3rd Choice	37.2%	36.8%
	(33.3%)	(38.1%)
4th Choice	24.4%	32.2%
	(27.8%)	(26.2%)

Corr. Co. = .1577 (.4418)

P = .003 (P = .000)

**To ensure there are no competitors**

(n = 343) (n = 78)

Before Mini-enterprise

(n = 343) (n = 78)

After Enterprise

1st Choice	7.3%	9.5%
	(6.7%)	(9.5%)
2nd Choice	32%	35.3
	(30%)	(25%)
3rd Choice	24.7%	32.7%
	(31.1%)	(32.1%)
4th Choice	36%	22.5%
	(32.2%)	(33.3%)

Corr. Co. = .2638 (.3788)

P = .000 (P = .001)

**To advertise well on television**

(n = 342) (n = 78)

Before Mini-enterprise

After Mini-enterprise

(n = 342) (n = 78)

1st Choice	7.0%	6.1%
	(10%)	(20.2%)
2nd Choice	26.7%	28.1%
	(37.8%)	(39.3%)
3rd Choice	33.7%	26.4%
	(32.2%)	(19%)
4th Choice	32.4%	39.4%
	(20%)	(21.4%)

Corr. Co. = .2886 (.4080)

P = .000 (P = .000)

**SUMMARY - Q B8 - The best way of ensuring a successful product or service is:-**

	Before Mini-enterprise	After Enterprise
<b>To seek the opinions of potential customers before starting production</b>		
1st Choice	79.1% (66.7%)	79.7 (63.9%)
<b>To make sure the product or service is cheap</b>		
1st Choice	6.4% (8.9%)	5.2% (7.1%)
<b>To ensure there are no competitors</b>		
1st Choice	7.3% (6.7%)	9.5% (9.5%)
<b>To advertise well on television</b>		
1st Choice	7.0% (10.0%)	6.1% (20.2%)

---

**Question B10 - A company needs profits to:-**

**Make money for the owner**

	Before Mini-enterprise (n = 339) (n = 79)	After Enterprise (n = 339) (n = 79)
1st Choice	8.5% (3.3%)	9.0% (7.1%)
2nd Choice	13.2% (23.3%)	11.3% (11.8%)
3rd Choice	15.6% (27.8)	13.6% (23.5%)
4th Choice	62.6% (45.6%)	66.2% (57.6%)
Corr. Co. = .4778 (.3502)		P = .000 (P = .002)

**To ensure the workforce keep their jobs**

	Before Mini-enterprise (n = 340) (n = 79)	After Enterprise (n = 340) (n = 79)
1st Choice	21.1% (16.7%)	19.7% (21.2%)
2nd Choice	22.8% (38.9%)	24.1% (29.4%)
3rd Choice	42.4% (30%)	43.8% (41.2%)
4th Choice	13.7% (14.4%)	12.5% (8.2%)
Corr. Co. = .2158 (.3799)		P = .000 (P = .001)

**To enable the company to survive during bad times**

	Before Mini-enterprise	After Enterprise
	(n = 340) (n = 79)	(n = 340) (n = 79)
1st Choice	26.9%	33.9%
	(24.4%)	(28.2%)
2nd Choice	38.0%	32.2%
	(24.4%)	(31.8%)
3rd Choice	21.9%	22%
	(24.4%)	(17.6%)
4th Choice	13.2%	11.9%
	(26.7%)	(22.4%)
Corr. Co. = .2777 (.4085)		P = .000 (P = .000)

**To enable it to invest in new ideas in the future**

	Before Mini-enterprise	After Enterprise
	(n = 340) (n = 78)	(n = 340) (n = 78)
1st Choice	43.9%	37.7%
	(43.3%)	(36.9%)
2nd Choice	25.7%	32.5%
	(32.2%)	(40.5%)
3rd Choice	20.2%	20.6%
	(21.1%)	(15.5%)
4th Choice	10.2%	9.3%
	(3.3%)	(7.1%)
Corr. Co. = .2334 (.3210)		P = .000 (P = .004)

**SUMMARY - Question B10 - A company needs profits to:-**

	Before Mini-enterprise	After Enterprise
<b>Make money for the owner</b>		
1st Choice	8.5%	9.0%
	(3.3%)	(7.1%)
<b>Ensure the workforce keep their jobs</b>		
1st Choice	21.1%	19.7%
	(16.7%)	(21.2%)
<b>Enable the company to survive during bad times</b>		
1st Choice	26.9%	33.9%
	(24.4%)	(28.2%)
<b>Enable it to invest in new ideas in the future</b>		
1st Choice	43.9%	37.7%
	(43.3%)	(36.9%)

Q B11 - If the company has so many orders that it cannot supply goods on the day promised it should:-

**Refuse to return customer telephone calls**

Before mini-enterprise		After Enterprise	
(n = 339) (n = 79)		(n = 339) (n = 79)	
1st Choice	4.1%	5.5%	
	(1.1%)	(3.5%)	
2nd Choice	8.5%	5.2%	
	(13.3%)	(14.1%)	
3rd Choice	51.6%	51.3%	
	(57.8%)	(48.2%)	
4th Choice	35.8%	38%	
	(27.8%)	(34.1%)	
Corr. Co = .1502 (.2003)		P = .006 (P = .077)	

**Sack the sales manager**

Before Mini-enterprise		After Enterprise	
(n = 339) (n = 78)		(n = 339) (n = 78)	
1st Choice	3.2%	3.5%	
	(3.3%)	(7.1%)	
2nd Choice	6.7%	7.2%	
	(13.3%)	(8.3%)	
3rd Choice	34.6%	38.0%	
	(31.1%)	(33.3%)	
4th Choice	55.4%	51.3%	
	(52.2%)	(51.2%)	
Corr. Co. = .1360 (.5685)		P = .012 (P = .000)	

**Tell the customer the problem and hope that they understand**

Before Mini-enterprise		After Enterprise	
(n = 341) (n = 79)		(n = 341) (n = 79)	
1st Choice	72.2%	71.1%	
	(63.3%)	(68.2%)	
2nd Choice	19.9%	20.8%	
	(18.9%)	(15.3%)	
3rd Choice	5.6%	4.6%	
	(12.2%)	(10.6%)	
4th Choice	2.3%	3.5%	
	(5.6%)	(5.9%)	
Corr. Co. = .1644 (.5441)		P = .002 (P = .000)	



**Speed up production and make everyone work overtime to try and finish the order**

	Before Mini-enterprise (n = 339) (n = 79)	After Enterprise (n = 339) (n = 79)
1st Choice	20.8% (20%)	20% (14.1%)
2nd Choice	64.8% (67.8%)	66.7% (72.9%)
3rd Choice	8.2% (8.9%)	6.1% (8.2%)
4th Choice	6.2% (3.3%)	7.2% (4.7%)
Corr. Co. = .0944 (.2709)		P = .083 (P = .016)

**SUMMARY - Q B11 - If the company has so many orders that it cannot supply goods on the day promised it should:-**

	Before mini-enterprise	After Enterprise
<b>Refuse to return customer telephone calls</b>		
1st Choice	4.1% (1.1%)	5.5% (3.5%)
<b>Sack the sales manager</b>		
1st Choice	3.2% (3.3%)	3.5% (7.1%)
<b>Tell the customer the problem and hope that they understand</b>		
1st Choice	72.2% (63.3%)	71.1% (68.2%)
<b>Speed up production and make everyone work overtime to try and finish the order</b>		
1st Choice	20.8% (20.0%)	20.0% (14.1%)

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B17 - The best way to ensure your company produces good quality products is:-

**To design the product so that it can be easily made without special skills**

	Before mini-enterprise	After Enterprise
	(n = 337) (n = 72)	(n = 337) (n = 72)
1st Choice	15.3%	16.3%
	(11.1%)	(11.1%)
2nd Choice	12.9%	14%
	(13.9%)	(9.7%)
3rd Choice	21.2%	21.2%
	(22.2%)	(19.4%)
4th Choice	50.6%	48.5%
	(52.8%)	(59.7%)
Corr. Co = .1976 (.3712)		P = .000 (P = .001)

**To have a series of quality control checks**

	Before mini-enterprise	After Enterprise
	(n = 336) (n = 72)	(n = 336) (n = 72)
1st Choice	38.1%	41.6%
	(40.3%)	(40.3%)
2nd Choice	29.8%	27.6%
	(23.6%)	(26.4%)
3rd Choice	22.1%	23.3%
	(20.8%)	(22.2%)
4th Choice	10%	7.6%
	(15.3%)	(11.1%)
Corr. Co. = .1563 (.0934)		P = .004 (P = .435)

**To give a guarantee with each product sold**

	Before mini-enterprise	After Enterprise
	(n = 337) (n = 72)	(n = 337) (n = 72)
1st Choice	23.8%	20.6%
	(19.4%)	(15.3%)
2nd Choice	28.2%	29.7%
	(31.9%)	(30.6%)
3rd Choice	28.8%	26.7%
	(30.6%)	(31.9%)
4th Choice	19.1%	23%
	(18.1%)	(22.2%)
Corr. Co. = .2296 (.3247)		P = .000 (P = .005)

**Organise courses so that employees take the idea of quality seriously**

	Before mini-enterprise (n = 339) (n = 72)	After Enterprise (n = 339) (n = 72)
1st Choice	23.5% (29.2%)	21.7% (33.3%)
2nd Choice	29% (30.6%)	28.4% (33.3%)
3rd Choice	27.6% (26.4%)	29% (26.4%)
4th Choice	19.9% (13.9%)	20.9% (6.9%)
Corr. Co. = 2476 (.3162)		P = .000 (P = .007)

**SUMMARY - B17 - The best way to ensure your company produces good quality products is:-**

	Before mini-enterprise	After Enterprise
<b>To design the product so that it can be easily made without special skills</b>		
1st Choice	15.3% (11.1%)	16.3% (11.1%)
<b>To have a series of quality control checks</b>		
1st Choice	38.1% (40.3%)	41.6% (40.3%)
<b>To give a guarantee with each product sold</b>		
1st Choice	23.8% (19.4%)	20.6% (15.3%)
<b>Organise courses so that employees take the idea of quality seriously</b>		
1st Choice	23.5% (29.2%)	21.7% (33.3%)

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**Knowledge of the Banking System**

The responses to questions B13 about raising money, B15 about the importance of keeping financial records, and B19 about the expectations of banks when customers request loans, have already been detailed above.

Not all the mini-enterprise companies needed to borrow money to start their business, choosing instead to find the capital required by selling shares, or using their own resources. Many of the younger students participating in a

mini-enterprise were very cautious when it came to borrowing money from a bank, particularly, when large sums of money were involved. However, once the need for financial resources had been established in a business or action plan they approached the bank in a positive and often assertive manner.

*"At the beginning Mr. 'Z' (the headteacher) said he would be giving loans of no more than £5.00 or £6.00 but we thought we needed £25.00 to buy the materials with so we sort of went for it and got the loan. We didn't say how much we wanted as soon as we went in because they might have said no straight away. So we showed them what we were doing and put off saying how much we wanted right to the very end." (school D)*

Question B20 sought to establish how important students felt market research was to their business.

Q B20 - It is important to conduct market research because:-

**It helps to produce an action plan**

Before mini-enterprise (n = 333) (n = 72)		After Enterprise (n = 333) (n = 72)	
1st Choice	18.4% (15.3%)	18.4% (23.6%)	
2nd Choice	15.4% (11.1%)	14.3% (9.7%)	
3rd Choice	33.5% (43.1%)	33.2% (30.6%)	
4th Choice	32.6% (30.6%)	34.1% (36.1%)	
Corr. Co. = .1888 (.3113)		P = .001 (P = .008)	

**It helps the company to advertise its product or service**

Before mini-enterprise (n = 333) (n = 72)		After Enterprise (n = 333) (n = 72)	
1st Choice	7.4% (12.5%)	9.9% (16.7%)	
2nd Choice	17.2% (16.7%)	15.2% (11.1%)	
3rd Choice	38.9% (23.6%)	35.6% (31.9%)	
4th Choice	36.5% (47.2%)	39.4% (40.3%)	
Corr. Co. = .2086 (.3501)		P = .000 (P = .003)	

**It helps the company to design its products or services to suit public taste**

	Before mini-enterprise	After Enterprise
	(n = 333) (n = 72)	(n = 333) (n = 72)
1st Choice	36.9%	31.4
	(41.7%)	(37.5%)
2nd Choice	32.4%	39.2%
	(30.6%)	(33.3%)
3rd Choice	16.7%	18.6%
	(16.7%)	(16.7%)
4th Choice	14%	10.8%
	(11.1%)	(12.5%)
Corr. Co. = .1554 (.2027)		P = .004 (P = .088)

**It provides information which helps the company to sell its products or services at a price people are willing to pay**

	Before mini-enterprise	After Enterprise
	(n = 334) (n = 72)	(n = 334) (n = 72)
1st Choice	37.6%	40.5%
	(30.6%)	(22.2%)
2nd Choice	34.9%	31.2%
	(41.7%)	(45.8%)
3rd Choice	10.9%	12.5%
	(16.7%)	(20.8%)
4th Choice	16.6%	17.7%
	(11.1%)	(11.1%)
Corr. Co. = .1922 (.1078)		P = .000 (P = .367)

**SUMMARY - Q B20 - It is important to conduct market research because:-**

	Before mini-enterprise	After Enterprise
<b>It helps to produce an action plan</b>		
1st Choice	18.4%	18.4%
	(15.3%)	(23.6%)
<b>It helps the company to advertise its product or service</b>		
1st Choice	7.4%	9.9%
	(12.5%)	(16.7%)
<b>It helps the company to design its products or services to suit public taste</b>		
1st Choice	36.9%	31.4
	(41.7%)	(37.5%)
<b>It provides information which helps the company to sell its products or services at a price people are willing to pay</b>		
1st Choice	37.6%	40.5%
	(30.6%)	(22.2%)

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## Communication Skills

Without exception, all of the enterprise activities organised in schools and colleges required students to extend their communications skills, both with each other and with a range of adults who were not their teachers. Sometimes this was to sell their products or services and in other cases to make a formal presentation to share holders at public meetings. To many students this was a new and daunting experience.

*"The worst bit was the presentation. When everyone had gone up and it was your turn. It was good experience though." (school F)*

*"You're the one who didn't have to say anything. It was me! I was the managing director, I was the one who had to tell them that we'd made a loss." (school F)*

Question A14 which suggested, that better decisions were made when problems were fully discussed, has been detailed above. Question A3 asked students whether they thought that adults took them seriously.

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### Q A3 Adults tend not to take me seriously because I am at school.

	Before mini-enterprise		After Enterprise	
	(n = 343) (n = 79)		(n = 343) (n = 79)	
Strongly Agree	9.0%		11.0%	
	(14.4%)		(14.1%)	
Tend to Agree	33.8%	42.8%	27.6%	38.7%
	(17.8%)	(32.2%)	(22.4%)	(36.5%)
Disagree	37.0%		45.6%	
	(37.8%)		(44.7%)	
Strongly Disagree	20.2%	57.2%	15.7%	61.3%
	(12.9%)	(50.7%)	(12.9%)	(57.6%)
Corr. Co. = .3738 (-.1174)			P = .000 (P = .303)	

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Question A7 asked students if they thought that discussions were more successful when someone was in control.

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**Q A7 Discussions are more successful when someone is in control**

	Before mini-enterprise		After Enterprise	
	(n = 340) (n = 78)		(n = 340) (n = 78)	
Strongly Agree	31.7%		34.7%	
	(21.3%)		(26.2%)	
Tend to Agree	45.3%	77.0%	43.7%	78.4%
	(43.8%)	(65.2%)	(50%)	(76.2%)
Disagree	15.7%		18.7%	
	(20.2%)		(14.3%)	
Strongly Disagree	7.3%	23%	2.9%	21.6%
	(4.5%)	(24.7%)	(1.2%)	(15.5%)
Corr. Co. = .3725 (.5689)			P = .000 (P = .000)	

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Question A10 asked student if they sought advice from others when they were in doubt.

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**Q A10 When I am in doubt, I find it is usually best to seek advice from others.**

	Before mini-enterprise		After Enterprise	
	(n = 346) (n = 72)		(n = 346) (n = 72)	
Strongly Agree	32.1%		23.9%	
	(31.9%)		(19.4%)	
Tend to Agree	58.7%	90.8%	66%	89.9%
	(56.9%)	(88.9%)	(61.1%)	(80.6%)
Disagree	8.1%		8.9%	
	(6.9%)		(18.1%)	
Strongly Disagree	1.2%	9.3%	1.2%	10.1%
	(4.2%)	(11.1%)	(1.4%)	(19.5%)
Corr. Co. = .1502 (.3546)			P = .005 (P = .002)	

---

Question A16 asks students if they find talking to strangers difficult.

---

**Q A16 I usually find talking to strangers difficult.**

Before mini-enterprise		After Enterprise	
(n = 345)	(n = 72)	(n = 345)	(n = 72)
Strongly Agree	15.1% (13.9%)	13.5% (8.3%)	
Tend to Agree	34.8% (36.1%)	49.9% (50.0%)	34% (47.2%)
Disagree	33% (37.5%)	32.6% (44.4%)	
Strongly Disagree	17.1% (12.5%)	50.1% (50.0%)	19.9% (8.3%)
Corr. Co. = .4349 (.3823)		P = .000 (P = .001)	

---

Question A17 asked students if they were able to persuade people to accept their point of view.

---

**Q A17 I generally find it easy to persuade people to accept my point of view.**

Before mini-enterprise		After Enterprise	
(n = 344)	(n = 79)	(n = 344)	(n = 79)
Strongly Agree	6.7% (3.3%)	7.2% (1.2%)	
Tend to Agree	46.4% (52.2%)	53% (55.6%)	50% (44.7%)
Disagree	41.4% (35.6%)	37.3% (51.8%)	57.2% (45.9%)
Strongly Disagree	5.5% (8.9%)	46.9% (44.5%)	5.5% (2.4%)
Corr. Co. = .3622 (4816)		P = .000 (P = .000)	

---

Q A19 asked students if they found it more difficult to give instructions to people they knew than they did to complete strangers.

---



**Q A19 Giving instructions to people you know is usually more difficult than giving instructions to strangers.**

	Before mini-enterprise		After Enterprise	
	(n = 345)(n = 78)		(n = 345)(n = 78)	
Strongly Agree	12.8%		18.2%	
	(12.2%)		(11.9%)	
Tend to Agree	38%	50.7%	41.2%	59.4%
	(30.0%)	(42.2%)	(34.5%)	(46.4%)
Disagree	32.8%		30.0%	
	(38.9%)		(46.4%)	
Strongly Disagree	16.5%	49.3%	10.7%	40.7%
	(18.9%)	(57.8%)	(7.1%)	(53.5%)
Corr. Co. = .1996 (.1858)			P = .000 (P = .103)	

---

Question A29 asked students if they found it easy to make themselves understood.

---

**Q A29 I find it easy to make myself understood by adults and people my own age.**

	Before mini-enterprise		After Enterprise	
	(n = 343) (n = 72%)		(n = 343) (n = 72%)	
Strongly Agree	17.7%		13.9%	
	(6.9%)		(4.2%)	
Tend to Agree	54.4%	72.1%	62.1%	76%
	(56.9%)	(63.9%)	(73.6%)	(77.8%)
Disagree	24.7%		18.5%	
	(31.9%)		(20.8%)	
Strongly Disagree	3.2%	27.9%	5.5%	24%
	(4.2%)	(36.1%)	(1.4%)	(22.2%)
Corr. Co. = .3403 (.1745)			P = .000 (P = .143)	

---

Question A38 asked students if they felt that it was better to say what they thought when working with others.

---

**A38 It is important to say what you think when working with others.**

	Before mini-enterprise		After Enterprise	
	(n = 344) (n = 72)		(n = 344) (n = 72)	
Strongly Agree	48.4%		41%	
	(44.4%)		(33.3%)	
Tend to Agree	44.6%	93.0%	50.3%	91.3%
	(44.4%)	(88.9%)	(54.2%)	(87.5%)
Disagree	6.4%		7.2%	
	(8.3%)		(12.5%)	
Strongly Disagree	0.6%	7.0%	1.4%	8.6%
	(2.8%)	(11.1%)	(0.0)	(12.5%)
Corr. Co. = .2676 (.1289)		P = .000 (P = .280)		

---

Question A43 asked students if they liked to share ideas with others.

---

**Q. A43 I do not like sharing my ideas with others.**

	Before mini-enterprise		After Enterprise	
	(n = 345) (n = 71%)		(n = 345) (n = 71%)	
Strongly Agree	6.4%		5.5%	
	(1.4%)		(2.8%)	
Tend to Agree	16.5%	22.9%	17.6%	23.1%
	(19.7%)	(21.1%)	(15.3%)	(18.1%)
Disagree	42.9%		43.2%	
	(45.1%)		(51.4%)	
Strongly Disagree	34.2%	77.1%	33.7%	76.9%
	(33.8%)	(78.9%)	(30.6%)	(82.0%)
Corr. Co. = .4392 (.3492)		p = .000 (p = .003)		

---

Question B6 asked students to suggest why it was important for senior executives to discuss the running of the company with their employees.

---

Q B6 It is important for senior employees to discuss the running of the company because:-

**It is too difficult for one person to run a company on their own**

	Before mini-enterprise (n = 342) (n = 79)	After Enterprise (n = 342) (n = 79)
1st Choice	19.8% (22.2%)	15.9% (23.5%)
2nd Choice	14.2% (21.1%)	13.9% (21.2%)
3rd Choice	24.4% (23.3%)	26.7% (20%)
4th Choice	41.6% (33.3%)	43.5% (35.3%)
Corr. Co. = .2373 (.2917)	P = .000 (P = .009)	

**It is important for people in the company to share their ideas**

	Before mini-enterprise (n = 344) (n = 79)	After Enterprise (n = 344) (n = 79)
1st Choice	45.5% (42.2%)	42.2% (43.5%)
2nd Choice	26.1% (41.1%)	30.1% (24.7%)
3rd Choice	21.2% (14.4%)	19.7% (25.9%)
4th Choice	7.2% (2.2%)	8.1% (5.9%)
Corr. Co. = .2309 (.2713)	P = .000 (P = .016)	

**Problems can be identified quickly**

	Before mini-enterprise (n = 342) (n = 79)	After Enterprise (n = 342) (n = 79)
1st Choice	24.7% (23.6%)	32.8% (17.6%)
2nd Choice	46.2% (38.2%)	38.8% (47.1%)
3rd Choice	20.3% (23.6%)	20% (25.9%)
4th Choice	8.7% (14.6%)	8.4% (9.4%)
Corr. Co. = .2498 (.2727)	P = .000 (P = .015)	

**It is a more democratic way of making decisions**

	Before mini-enterprise (n = 342) (n = 79)	After Enterprise (n = 342) (n = 79)
1st Choice	10.2% (12.2%)	9.6% (9.4%)
2nd Choice	14.0% (22.2%)	17.1% (21.2%)
3rd Choice	33.4% (31.1%)	33.6% (30.6%)
4th Choice	42.4% (34.4%)	39.7% (38.8%)
Corr. Co. = .2564 (.2325)	P = .000 (P = .039)	

**SUMMARY - It is important for senior employees to discuss the running of the company because:-**

	Before mini-enterprise	After Enterprise
<b>It is too difficult for one person to run a company on their own</b>		
1st Choice	19.8% (22.2%)	15.9% (23.5%)
<b>It is important for people in the company to share their ideas</b>		
1st Choice	45.5% (42.2%)	42.2% (43.5%)
<b>Problems can be identified quickly</b>		
1st Choice	24.7% (23.6%)	32.8% (17.6%)
<b>It is a more democratic way of making decisions</b>		
1st Choice	10.2% (12.2%)	9.6% (9.4%)

**KNOWLEDGE OF THE MARKETS**

One reason for the introduction of mini-enterprise into schools was to enable students to gain a simulated work experience. When questioned, students certainly saw their activities as an introduction to business practices.

*"It's an introduction to business and that's it really. People in school don't really have any idea of what goes on in the boardroom, so it's really an introduction to the way a company is run, its structure and things like that." (school B)*

The questions in this cluster therefore attempted to explore the nature of the experience and how it contributed to students' knowledge and attitudes of work in a business environment.

*"I think it is best to do as we did it in mini-enterprise, because first hand experience is better than reading it out of books about other peoples' experiences." (school D)*

Question A33 asked students whether they thought that it was hard to work in industry.

---

**Q A33 Working in industry tends to be hard work.**

	Before mini-enterprise		After Enterprise	
	(n = 341)	(n = 72)	(n = 341)	(n = 72)
Strongly Agree	9.4%		8.1%	
	(5.6%)		(4.2%)	
Tend to Agree	60.7%	70.1%	57.1%	65.1%
	(69.4%)	(75.0%)	(56.9%)	(61.1%)
Disagree	26.7%		32.6%	
	(22.2%)		(38.9%)	
Strongly Disagree	3.3%	30%	2.3%	34.9%
	(2.8%)	(25.0%)	(0.0%)	(38.9%)
Corr. Co. = .2018 (.2759)		P = .000 (P = .019)		

---

Question 48 asked students whether they thought that it was easier to work in an office than it was to work in a factory.

---

**Q A48 Working in an office tends to be easier than working in a factory**

	Before mini-enterprise		After Enterprise	
	(n = 341)	(n = 72)	(n = 341)	(n = 72)
Strongly Agree	19.0%		15.6%	
	(13.9%)		(9.7%)	
Tend to Agree	37.7%	56.7%	27.5%	43.1%
	(41.7%)	(55.6%)	(29.2%)	(38.9%)
Disagree	28.9%		37.6%	
	(30.6%)		(41.7%)	
Strongly Disagree	14.3%	43.2%	19.4%	57.6%
	(13.9%)	(44.5%)	(19.4%)	(61.1%)
Corr. Co. = .3700 (.4245)		P = .000 (P = .000)		

---

Interestingly, many of the students commented on their dislike of the paper-work that seemed to be involved with the running of their companies.

When asked what they disliked most about their mini-enterprise they commonly replied:-

*"The enormous amount of paperwork."*

*"The writing of reports." (school B)*

Question B8 which related to the best way to ensure a successful product and B20 which investigated students' thoughts about the importance of market research have been detailed above.

Question B4 asked students to comment on what they thought the key to successful selling was.

---

B4 The key to successful selling is:-

**Spending a lot of money on advertising**

Before mini-enterprise		After Enterprise	
(n = 342)(n = 78)		(n = 342)(n = 78)	
1st Choice	5.8%	7.0%	
	(16.9%)	(9.4%)	
2nd Choice	17.1%	26.1%	
	(24.7%)	(30.6%)	
3rd Choice	47.4%	40.9%	
	(30.3%)	(35.3%)	
4th Choice	29.8%	26.1%	
	(28.1%)	(24.7%)	
Corr. Co. = .3732 (.4901)		P = .000 (P = .000)	

**Carefully planning how best to sell your product or service**

Before mini-enterprise		After Enterprise	
(n = 344) (n = 78)		(n = 344) (n = 78)	
1st Choice	78.3%	72.5%	
	(70.8%)	(67.1%)	
2nd Choice	13.0%	17.1%	
	(20.2%)	(23.5%)	
3rd Choice	5.8%	8.1%	
	(7.9%)	(4.7%)	
4th Choice	2.9%	2.3%	
	(1.1%)	(4.7%)	
Corr. C. = .2335 (.4144)		P = .000 (P = .000)	

**Giving high bonuses to the sales staff**

Before mini-enterprise		After mini-enterprise	
(n = 342) (n = 78)		(n = 342) (n = 78)	
1st Choice	1.4%	2.3%	
	(4.5%)	(4.7%)	
2nd Choice	8.7%	11.9%	
	(16.9%)	(14.1%)	
3rd Choice	30.7%	27.8%	
	(32.6%)	(35.3%)	
4th Choice	59.1%	58%	
	(46.1%)	(45.9%)	
Corr. Co. = .2733 (.3859)		P = .000 (P = .000)	

**Charging less for your product or service than your competitors**

	Before mini-enterprise (n = 342) (n = 78)	After Enterprise (n = 342) (n = 78)
1st Choice	14.8% (12.4%)	18.6% (21.2%)
2nd Choice	61.2% (53.9%)	44.6% (45.9%)
3rd Choice	15.9% (24.7%)	23.5% (20%)
4th Choice	8.1% (9%)	13.3% (12.9%)
Corr. Co. = .2361 (.2515)		P = .000 (P = .026)

**SUMMARY - The key to successful selling is:-**

	Before mini-enterprise	After Enterprise
<b>Spending a lot of money on advertising</b>		
1st Choice	5.8% (16.9%)	7.0% (9.4%)
<b>Carefully planning how best to sell your product or service</b>		
1st Choice	78.3% (70.8%)	72.5% (67.1%)
<b>Giving high bonuses to the sales staff</b>		
1st Choice	1.4% (4.5%)	2.3% (4.7%)
<b>Charging less for your product or service than your competitors</b>		
1st Choice	14.8% (12.4%)	18.6% (21.2%)

**MANUFACTURING METHODS**

It is difficult for students to gain first hand knowledge and experience of manufacturing methods in school, as vocational training is just one aspect of their educational experience. However, during the course of their mini-enterprise experience they would normally involve themselves in the manufacture of some artefact, or the provision of a service of some kind. Additionally, they might have to face elements of competition and become involved in aspects of company life such as research and development and production control.



Question A9 asked students if they found it easier to work when they knew what the end product would be.

**Q A9 I find it easier to work when I know what the end product will be.**

Before mini-enterprise		After Enterprise	
(n = 342) (n = 72)		(n = 342) (n = 72)	
Strongly Agree	26.9% (23.6%)	20.7% (20.8%)	
Tend to Agree	56.4% (55.6%)	83.3% (79.2%)	57.1% (76.4%)
Disagree	13.7% (16.7%)	18.4% (22.2%)	
Strongly Disagree	2.6% (4.2%)	16.3% (20.9%)	3.7% (23.6%)
Corr. Co. = .2310 (.5279)		P = .000 (P = .000)	

Question A23 asked students if they enjoyed making things.

**Q A23 I enjoy making things**

Before mini-enterprise		After Enterprise	
(n = 343) (n = 78)		(n = 343) (n = 78)	
Strongly Agree	35.9% (47.2%)	29.7% (42.4%)	
Tend to Agree	41.4% (41.6%)	77.3% (88.8%)	43.8% (88.2%)
Disagree	14.9% (9.0%)	19% (10.6%)	
Strongly Disagree	7.9% (2.2%)	22.8% (11.2%)	7.5% (11.8%)
Corr. Co. = .6383 (.5403)		P = .000 (P = .000)	

Question A 44 asked students whether they tried to complete practical tasks which were set at school.

Q A44 When I am given a practical task to do at school, I try to complete it successfully.

	Before mini-enterprise (n = 342) (n = 72)		After Enterprise (n = 342) (n = 72)	
Strongly Agree	26.8%		30.1%	
	(30.6%)		(29.2%)	
Tend to Agree	67.3%	94.2%	59.8%	89.9%
	(63.9%)	(94.4%)	(61.1%)	(90.3%)
Disagree	5%		8.1%	
	(4.2%)		(9.7%)	
Strongly Disagree	0.9	5.9%	2.0%	10.1%
	(1.4%)	(5.6%)	(0.0)	(9.7%)
Corr. Co. = .2968 (.4255)		P = .000 (P = .000)		

Question B9 sought students views on the value of manufacturing products on a production line.

Q B9 Better products are made on a production line because:-

**All products are of similar quality**

	Before mini-enterprise (n = 337) (n = 75)		After Enterprise (n = 337) (n = 75)	
1st Choice	16.2%		24.3%	
	(15.9%)		(23.5%)	
2nd Choice	20.9%		22.9%	
	(28.4%)		(25.9%)	
3rd Choice	24.2%		23.5%	
	(30.7%)		(24.7%)	
4th Choice	38.6%		29.3%	
	(25.0%)		(25.9%)	
Corr. Co. = .2634 (.2932)		P = .000 (P = .011)		

**It cuts the cost of production**

	Before mini-enterprise	After Enterprise
	(n = 337) (n = 78)	(n = 337) (n = 78)
1st Choice	23.0%	17.1%
	(15.7%)	(15.3%)
2nd Choice	32.7%	30.7%
	(30.3%)	(34.1%)
3rd Choice	29.2%	32.5%
	(31.5%)	(25.9%)
4th Choice	15.0%	19.7%
	(22.5%)	(24.7%)
Corr. Co. = .2040 (.3211)		P = .000 (P = .004)

**The average worker could not be expected to learn how to do everything**

	Before mini-enterprise	After Enterprise
	(n = 338) (n = 76)	(n = 338) (n = 76)
1st Choice	13.0%	13.0%
	(23.6%)	(18.1%)
2nd Choice	23%	23.7%
	(32.6%)	(31.3%)
3rd Choice	29.8%	26.3%
	(21.3%)	(26.5%)
4th Choice	34.2%	37%
	(22.5%)	(24.1%)
Corr. Co. .1570 (.5143)		P = .004 (P = .000)

**The product can be produced more quickly than it would be if it were produced by one person from beginning to end.**

	Before mini-enterprise	After Enterprise
	(n = 338) (n = 77)	(n = 338) (n = 77)
1st Choice	47.4%	45.8%
	(39.3%)	(38.1%)
2nd Choice	23.8%	22.6%
	(29.2%)	(26.2%)
3rd Choice	16.8%	17.7%
	(19.1%)	(16.7%)
4th Choice	12.1%	13.9%
	(12.4%)	(19%)
Corr. Co. = .2152 (.3448)		P = .000 (P = .002)

## **SUMMARY - B9 Better products are made on a production line because:-**

	Before mini-enterprise	After Enterprise
<b>All products are of similar quality</b>		
1st Choice	16.2%	24.3%
	(15.9%)	(23.5%)
<b>It cuts the cost of production</b>		
1st Choice	23.0%	17.1%
	(15.7%)	(15.3%)
<b>The average worker could not be expected to learn how to do everything</b>		
1st Choice	13.0%	13.0%
	(23.6%)	(18..1%)
<b>The product can be produced more quickly than it would be if it were produced by one person from beginning to end.</b>		
1st Choice	47.4%	45.8%
	(39.3%)	(38..1%)

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## **SALES TECHNIQUES**

Questions B4, 8 and 17 have all been addressed above.

Some students found selling their products or services difficult when they attempted to expand their market beyond their family and friends. Some were shocked by the ingenuity and enterprise of students in other schools or colleges. Articles in local papers, or visits arranged by teachers or advisers often galvanised them into action.

*"I know we had quite a shock when we visited 'X' college and saw how well they were doing. ...there was an article in the paper saying they had made a profit which was double or treble ours and they seemed to be making a very limited product, but seemed to be making a very good job of it. It was a high quality product. Things seemed to be going quite well. But they were older than us." (school B)*

Question A36 therefore sought student reaction to competition at school.

**Q A36 I tend to work better when I have competition at school**

	Before mini-enterprise		After Enterprise	
(n = 346) (n = 72)			(n = 346) (n = 72)	
Strongly Agree	24.6%		19%	
	(27.8%)		(15.3%)	
Tend to Agree	35.3%	59.9%	36%	55.0%
	(27.8%)	(55.6%)	(30.6%)	(45.8%)
Disagree	32.9%		36.9%	
	(33.3%)		(44.4%)	
Strongly Disagree	7.2%	40.1%	8.1%	45.0%
	(11.1%)	(44.4%)	(9.7%)	(54.1%)
Corr. Co. = .4075 (.4099)		P = .000 (P = .000)		

Question B14 sought to investigate students' understanding of the purpose of advertising.

B14 Advertising is a way of:-

**Informing the public about the company's products**

	Before mini-enterprise		After Enterprise	
(n = 340) (n = 72)			(n = 340) (n = 72)	
1st Choice	76.9%		72.8%	
	(75%)		(72%)	
2nd Choice	12.0%		12.5%	
	(16.7%)		(15.3%)	
3rd Choice	7.6%		7.0%	
	(4.2%)		(6.9%)	
4th Choice	3.5%		7.8%	
	(4.2%)		(5.6%)	
Corr. Co. = .1564 (.1656)		P = .004 (P = .164)		

**Increasing sales**

	Before mini-enterprise		After Enterprise	
(n = 339) (n = 72)			(n = 339) (n = 72)	
1st Choice	14.4%		14.5%	
	(15.3%)		(18.1%)	
2nd Choice	48.7%		45.8%	
	(47.2)		(44.4%)	
3rd Choice	27.6%		28.4%	
	(25.0%)		(26.4%)	
4th Choice	9.4%		11.3%	
	(12.5%)		(11.1%)	
Corr. Co. = .1975 (.2881)		P = .000 (p = .014)		

**Improving the company's image**

	Before mini-enterprise	After Enterprise
	(n = 340) (n = 72)	(n = 340) (n = 72)
1st Choice	6.7%	10.4%
	(2.8%)	(8.3%)
2nd Choice	25.8%	39.8%
	(26.4%)	(23.6%)
3rd Choice	37.5%	35.3%
	(41.7%)	(45.8%)
4th Choice	29.9%	24.6%
	(29.2%)	(22.2%)
Corr. Co. = .2438 (.2860)		P = .000 (P = .015)

**Ensuring that the company does not lose sales to a competitor**

	Before mini-enterprise	After Enterprise
	(n = 339) (n = 72)	(n = 339) (n = 72)
1st Choice	2.1%	2.6%
	(8.3%)	(1.4%)
2nd Choice	13.8%	11.9%
	(8.3%)	(16.7%)
3rd Choice	27%	29.3%
	(29.2%)	(19.4%)
4th Choice	57.2%	56.2%
	(54.2%)	(62.5%)
Corr. Co. = .2301 (.2002)		P = .000 (P = .092)

**SUMMARY - Advertising is a way of:-**

	Before mini-enterprise	After Enterprise
<b>Informing the public about the company's products</b>		
1st Choice	76.9%	72.8%
	(75.0%)	(72.0%)
<b>Increasing sales</b>		
1st Choice	14.4%	14.5%
	(15.3%)	(18.1%)
<b>Improving the company's image</b>		
1st Choice	6.7%	10.4%
	(2.8%)	(8.3%)
<b>Ensuring that the company does not lose sales to a competitor</b>		
1st Choice	2.1%	2.6%
	(8.3%)	(1.4%)

Question B18 asked students about what they would do if their product was not selling.

Q B18 If a product is not selling well the best plan is to:-

**Stop production and sell the remaining stock of the product at cut price**

	Before mini-enterprise	After Enterprise
	(n = 336) (n = 72)	(n = 336) (n = 72)
1st Choice	21.8% (19.4%)	21.5% (18.1%)
2nd Choice	11.2% (13.9%)	1.01% (13.9%)
3rd Choice	20.4% (22.2%)	18.3% (19.4%)
4th Choice	46.6% (44.4%)	49.1% (48.6%)
Corr. Co. = .3831 (.4002)	P = .000 (P = .000)	

**Try to sell the product in different markets**

	Before mini-enterprise	After Enterprise
	(n = 336) (n = 72)	(n = 336) (n = 72)
1st Choice	34.5% (38.9%)	42.1% (41.7%)
2nd Choice	33.6% (26.4%)	28.5% (30.6%)
3rd Choice	23% (22.2%)	20.9% (20.8%)
4th Choice	8.8% (12.5%)	8.4% (6.9%)
Corr. Co. = .3456 (.3545)	P = .000 (P = .002)	

**Try to cut the cost of production**

	Before mini-enterprise	After Enterprise
	(n = 337) (n = 72)	(n = 337) (n = 72)
1st Choice	28% (26.4%)	21.4% (26.4%)
2nd Choice	37.2% (44.4%)	35.4% (36.1%)
3rd Choice	24.2% (22.2%)	30.1% (23.6%)
4th Choice	10.6% (6.9%)	13.0% (13.9%)
Corr. Co. = .1007 (.1645)	P = .065 (P = .167)	

**Pay more for advertising**

	Before mini-enterprise (n = 337) (n = 72)	After Enterprise (n = 337) (n = 72)
1st Choice	16.5% (15.3%)	15.1% (13.9%)
2nd Choice	17.9% (13.9%)	24.7% (19.4%)
3rd Choice	32.1 (34.7%)	30.8% (36.1%)
4th Choice	33.5% (36.1%)	29.4% (30.6%)
Corr. Co. = .1792 (.2868)	P = .001 (P = .015)	

**SUMMARY - If a product is not selling well the best plan is to:-**

	Before mini-enterprise	After Enterprise
<b>Stop production and sell the remaining stock of the product at cut price</b>		
1st Choice	21.8% (19.4%)	21.5% (18.1%)
<b>Try to sell the product in different markets</b>		
1st Choice	34.5% (38.9%)	42.1% (41.7%)
<b>Try to cut the cost of production</b>		
1st Choice	28.0% (26.4%)	21.4% (26.4%)
<b>Pay more for advertising</b>		
1st Choice	16.5% (15.3%)	15.1% (13.9%)

**Meetings**

Questions A7, A14, A17, 38 and A43 have all been detailed above.

One of the major new tasks that students had to undertake during their mini-enterprise was to participate in or control meetings of various kinds. Sometimes this would take the form of a public meeting where they were required to address a number of people, sometimes it was a meeting with the bank manager, and on other occasions it was a company meeting when they had to discuss company matters with their fellow students. Many students found it frustrating to discuss actions plans when they could actually be doing the task in



question. Question A22 therefore, asked student whether they preferred discussion to action.

**Q A22 I'd rather get on with a job than spend time talking about it.**

	Before mini-enterprise		After Enterprise	
	(n = 345) (n = 72)		(n = 345) (n = 72)	
Strongly agree	22.0%		21.9%	
	(25%)		(20.3%)	
Tend to Agree	45.0%	67.2%	45.2%	67.1%
	(42.1%)	(67.1%)	(40.5%)	(60.8%)
Disagree	27.0%		26.2%	
	(26.3%)		(35.1%)	
Strongly Disagree	5.8%	32.8%	6.6%	32.8%
	(6.6%)	(32.9%)	(4.1%)	(39.2%)
Corr. Co. = .3991 (.1646)	P = .000 (P = .167)			

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Question A35 asked students if they found talking to people a good way of finding new ideas.

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**Q A35 I find talking to people is the best way of finding out about new ideas.**

	Before mini-enterprise		After Enterprise	
	(n = 343) (n = 72)		(n = 343) (n = 72)	
Strongly agree	39.2%		30.3%	
	(40.3%)		(29.2%)	
Tend to Agree	53.5%	92.7%	57.5%	87.9%
	(54.2%)	(94.4%)	(69.4%)	(98.6%)
Disagree	5.8%		10.4%	
	(4.2%)		(1.4%)	
Strongly Disagree	1.5%	7.3%	1.7%	12.1%
	(1.4%)	(5.6%)	(0.0%)	(1.4%)
Corr. Co. = .2265 (.1553)	P = .000 (P = .193)			

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Often the students found that discussing their ideas with others helped establish the viability of the project. In some cases they were able to do this by discussing the project amongst themselves, on other occasions by discussing it with their teachers or advisers.

*"They'd put forward some suggestions. They would never say if what you were doing was not a good idea ... they never condemned what you were doing. Like that Tee shirt printing...they never said that's stupid, it will never get off the ground, although it never did." (school A)*

One of the features of mini-enterprise was that students were encouraged to work together, to share ideas and problems, to work as a group or company rather than individuals.

*"In the beginning we all sat round and thought of products and thought, wouldn't it be good if we could make this, but it was a bit extravagant and we realised that we didn't have the capabilities so we were a bit more careful." (school A)*

This was a marked contrast to their usual working practices at school.

Question B5 asked students why they thought that some companies encouraged their employees to work in teams.

Q B5 Some companies encourage their employees to work as a team because:-

**It overcomes the individual's weakness**

	Before mini-enterprise (n = 343) (n = 78)	After mini-enterprise (n = 343) (n = 78)
1st Choice	23.3% (22.2%)	28.9% (23.8%)
2nd Choice	40.4% (51.1%)	41.9% (50%)
3rd Choice	21.2% (14.4%)	18.8% (14.3%)
4th Choice	15.1% (12.2%)	10.4% (11.9%)
Corr. Co. = .2329 (.4904)	P = .000 (P = .000)	

**It produces more useful ideas**

	Before mini-enterprise	After Enterprise
(n = 343) (n = 79)		(n = 343) (n = 79)
1st Choice	61.2% (61.1%)	56.2% (56.5%)
2nd Choice	25.2% (23.3%)	25.2% (28.2%)
3rd Choice	10.4% (13.3%)	13.3% (10.6%)
4th Choice	3.2% (2.2%)	5.2% (4.7%)
Corr. Co. = .2029 (.4843)		P = .000 (P = .000)

**It prevents unhealthy competition within the company**

	Before mini-enterprise	After Enterprise
(n = 342) (n = 78)		(n = 342) (n = 78)
1st Choice	11.3% (4.4%)	10.1% (4.8%)
2nd Choice	18.9% (24.4%)	20% (16.7%)
3rd Choice	39% (44.4%)	42.6% (40.5%)
4th Choice	30.8% (26.7%)	27.2% (38.1%)
Corr. Co. = .1818 (.4573)		P = .001 (P = .000)

**It enables the boss to have more control over his/her employees**

	Before mini-enterprise	After Enterprise
(n = 342) (n = 79)		(n = 342) (n = 79)
1st Choice	4.4% (2.2%)	4.3% (5.9%)
2nd Choice	15.4% (25.6%)	12.8% (33.5%)
3rd Choice	29.1% (25.6%)	25.8% (32.9%)
4th Choice	51.2% (46.7%)	57.1% (37.6%)
Corr. Co = .3217 (.2497)		P = .000 (P = .026)

**SUMMARY - Some companies encourage their employees to work as a team because:-**

	Before mini-enterprise	After mini-enterprise
<b>It overcomes the individual's weakness</b>		
1st Choice	23.3%	28.9%
	(22.2%)	(23.8%)
<b>It produces more useful ideas</b>		
1st Choice	61.2%	56.2%
	(61.1%)	(56.5%)
<b>It prevents unhealthy competition within the company</b>		
1st Choice	11.3%	10.1%
	(4.4%)	(4.8%)
<b>It enables the boss to have more control over his/her employees</b>		
1st Choice	4.4%	4.3%
	(2.2%)	(5.9%)

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**PLANNING (SKILLS)**

Question A9, relating to students finding it easier to work when they knew what the end product was or was going to be, and question A32 which was concerned with having all the necessary information before making decisions, have been outlined above. One of the first tasks facing any mini-company, certainly any company that wishing to borrow money from a bank, is to formulate a business plan. Many students, particularly those in the early stages of education often find such forward planning difficult.

Most of the mini-companies undertook some form of market research although often this was approached in a rather rudimentary way.

*"..we went around the school and we said, If we were going to sell these would you think of buying one, and how much would you pay?" (school C)*

*"What we were doing is that we had posters around the school asking anyone if they wanted a photograph of their own, digitised and we would come out with a print of the photograph as a digital image." (school F)*

Question B7 asked students what they felt was the best way of producing new ideas.

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Q B7 The best way of producing new ideas is:-

**To hold a competition**

	Before mini-enterprise (n = 342) (n = 79)	After Enterprise (n = 342) (n = 79)
1st Choice	6.7% (15.6%)	9.3% (12.9%)
2nd Choice	27.6% (30%)	20.9% (38.8%)
3rd Choice	33.7% (31.1%)	38% (27.1%)
4th Choice	32% (23.3%)	31.9% (21.2%)
Corr. Co. = .3732 (.2089)	P = .000 (P = .065)	

**To have a session where everybody contributes their ideas**

	Before mini-enterprise (n = 344) (n = 78)	After Enterprise (n = 344) (n = 78)
1st Choice	72.5% (71.1%)	74.6% (64.3%)
2nd Choice	17.1% (21.1%)	17.3% (23.8%)
3rd Choice	6.7% (4.4%)	6.1% (7.1%)
4th Choice	3.8% (3.3%)	2.0% (4.8%)
Corr. Co. = .2335 (.2350)	P = .000 (P = .038)	

**To look at what your competitors are doing**

	Before mini-enterprise (n = 342) (n = 79)	After Enterprise (n = 342) (n = 79)
1st Choice	14.2% (6.7%)	11.9% (15.3%)
2nd Choice	41.6% (51.1%)	45.2% (35.3%)
3rd Choice	25.3% (17.8%)	25.5% (21.2%)
4th Choice	18.9% (24.4%)	17.4% (28.2%)
Corr. Co. = .2733 (.2556)	P = .000 (P = .023)	

**To pay your employees a good bonus for every new idea they suggest which is used by the company**

	Before mini-enterprise (n = 342) (n = 79)	After Enterprise (n = 342) (n = 79)
1st Choice	6.7% (10.0%)	4.6% (8.2%)
2nd Choice	14.0% (23.3%)	17.1% (23.5%)
3rd Choice	34.3% (36.7%)	30.1% (34.1%)
4th Choice	45.1% (30%)	48.1% (34.1%)
Corr. Co. = .2361 (.4748)	P = .000 (P = .000)	

SUMMARY - The best way of producing new ideas is:-

	Before mini-enterprise	After Enterprise
<b>To hold a competition</b>		
1st Choice	6.7% (15.6%)	9.3% (12.9%)
<b>To have a session where everybody contributes their ideas</b>		
1st Choice	72.5% (71.1%)	74.6% (64.3%)
<b>To look at what your competitors are doing</b>		
1st Choice	14.2% (6.7%)	11.9% (15.3%)
<b>To pay your employees a good bonus for every new idea they suggest which is used by the company</b>		
1st Choice	6.7% (10.0%)	4.6% (8.2%)

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Question B20 asked students why they thought market research was important.

Q B20 It is important to conduct market research because:-

**It helps to produce a plan of action**

	Before mini-enterprise (n = 333) (n = 72%)	After Enterprise (n = 333) (n = 72%)
1st Choice	18.4% (15.3%)	18.4% (23.6%)
2nd Choice	15.4% (11.1%)	14.3% (9.7%)
3rd Choice	33.5% (43.1%)	33.2% (30.6%)
4th Choice	32.6% (30.6%)	34.1% (36.1%)
Corr. Co. = .1888 (.3113)	P = .001 (P = .008)	

**It helps the company to advertise its products or service**

	Before mini-enterprise (n = 333) (n = 72)	After Enterprise (n = 333) (n = 72)
1st Choice	7.4% (12.5%)	9.9% (16.7%)
2nd Choice	17.2% (16.7%)	15.2% (11.1%)
3rd Choice	38.9% (23.6%)	35.6% (31.9%)
4th Choice	36.5% (47.2%)	39.4% (40.3%)
Corr. Co. = .2086 (.3501)	P = .000 (P = .003)	

**It helps the company design its products or service to suit public taste**

	Before mini-enterprise (n = 333) (n = 72)	After Enterprise (n = 333) (n = 72)
1st Choice	36.9% (41.7%)	31.4% (37.5%)
2nd Choice	32.4% (30.6%)	39.2% (33.3%)
3rd Choice	16.7% (16.7%)	18.6% (16.7%)
4th Choice	14.0% (11.1%)	10.8% (12.5%)
Corr. Co. = .1554 (.2027)	P = .004 (P = .088)	

**It provides information which helps the company to sell its products or services at a price people are willing to pay**

	Before mini-enterprise (n = 334) (n = 72)	After Enterprise (n = 334) (n = 72)
1st Choice	37.6% (30.6%)	40.5% (22.2%)
2nd Choice	34.9% (41.7%)	31.2% (45.8%)
3rd Choice	10.9% (16.7%)	12.5% (20.8%)
4th Choice	16.6% (11.1%)	15.7% (11.1%)
Corr. Co. = .1922 (.1078)	P = .000 (P = .367)	

**SUMMARY - It is important to conduct market research because:-**

	Before mini-enterprise	After Enterprise
<b>It helps to produce a plan of action</b>		
1st Choice	18.4% (15.3%)	18.4% (23.6%)
<b>It helps the company to advertise its products or service</b>		
1st Choice	7.4% (12.5%)	9.9% (16.7%)
<b>It helps the company design its products or service to suit public taste</b>		
1st Choice	36.9% (41.7%)	31.4% (37.5%)
<b>It provides information which helps the company to sell its products or services at a price people are willing to pay</b>		
1st Choice	37.6% (30.6%)	40.5% (22.2%)

## PROBLEM SOLVING SKILLS

Questions A26,30,34,47 and B7 & 11 have all been detailed above.

Students who participated in a mini-enterprise company quickly found that they were solving problems for themselves. Once they realised that their teachers were not going to come up with the answers they developed a very mature approach to the running of their company.

*"You've got to do it right after some advice. If you were 1p out it's not so bad. We did a balance sheet wrong and we found that it had been entered wrong so we had to do it all again." (school D)*



## DECISION MAKING SKILLS

Questions A10, A12, A32, B5, B6 and B7 have been covered above.

Students were quickly made aware that once their mini-enterprise company had been established, they were expected to take their own decisions. The students enjoyed this freedom and being given the responsibility.

*"Its such fun organising everything. It gives us experience for when we are older and we come to do the same kind of job." (b) (school G)*

*"Instead of just writing about it and thinking about it, we were actually doing it. If you did it from a book you wouldn't have to think about it for yourself, you could just think ... oh those people are doing that, and things like that. But when we were actually doing the company, you had to think about everything you did and whether you were going to make money or lose money." (school C)*

## PRICING OF GOODS AND SERVICES

Responses to questions B4, B9, B10 and B18 have all been detailed above.

## UNDERSTANDING THE NEED FOR QUALITY CONTROL

Questions A5, A12, and B17 have all been addressed above. Question A42 asked students if they were self critical of their work at school.

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### A 42 I tend to be very self critical of my work at school.

Before mini-enterprise (n = 344) (n = 71)		After Enterprise (n = 344) (n = 71)	
Strongly agree	16.8% (11.1%)	22.0% (9.9%)	
Tend to Agree	50.0% (55.6%)	66.8% (66.7%)	49.0% (49.3%)
Disagree	27.7% (30.6%)	26.4% (38%)	71.0% (59.2%)
Strongly Disagree	5.5% (2.8%)	33.2% (33.4%)	2.6% (2.8%)
Corr. Co. = .4057 (.2946)		P = .000 (P = .013)	29.0% (40.8%)

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## KNOWLEDGE OF EMPLOYEES' RIGHTS/THE PLACE OF TRADE UNIONS

Questions A7, A38, B1, B2, B6 and B12, have all been addressed above.

Question A13 asked students if they believed that everyone did something well.

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### Q A13 Everyone does something well

	Before Mini-enterprise		After Enterprise	
	(n = 345) (n = 71)		(n = 345) (n = 71)	
Strongly agree	49.6%		56.8%	
	(47.2%)		(57.7%)	
Tend to Agree	34.8%	84.3%	29.7%	86.5%
	(37.5%)	(84.7%)	(36.6%)	(94.4%)
Disagree	11.6%		9.5%	
	(12.5%)		(4.2%)	
Strongly Disagree	4.1%	15.7%	4.0%	13.5%
	(2.8%)	(15.3%)	(1.4%)	(5.6%)
Corr. Co. = .3460 (.3540)		P = .000 (P = .002)		

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## DEVELOPING NEW IDEAS

Questions A34, and B7 have been dealt with above.

## KNOWLEDGE OF COMPETITIVE FORCES IN ENTERPRISE

Questions A36, B4, B8, B10, B14, B18 and B20 have been addressed above.

The clusters of results reported in the following section are those aspects of the mini-enterprise experience which generally relate to student attitudes and values. In some clusters there is a degree of overlap with the skills and knowledge attained and the results have been reported in the previous section.

Self Commitment

Students' work in a mini-enterprise company involved them in being more self disciplined than they would in their normal lessons. The purpose of this cluster of questions therefore was to address how involved the students became in their mini-enterprise activities.

Q A2, A5, A11, A18, A30, A34, A44, A46.

Question A2 questioned students about their ability to concentrate on school work compared with projects undertaken outside school.

*"It might seem a lot of effort, but it's worth it in the end. That certificate (Young Enterprise Certificate) is worth something. It's worth attending, there's no point in going to so many meetings and then giving up." (school B)*

Q A2 I find it more difficult to concentrate on a school project than I do when I am working at a job outside school.

	Before Mini-enterprise		After Enterprise	
	(n = 343)	(n = 79)	(n = 343)	(n = 79)
Strongly Agree	11.6%		13.3%	
	(13.3%)		(16.5%)	
Tend to Agree	39.2%	50.9%	43.6%	56.9%
	(37.8%)	(51.1%)	(34.1%)	(54.1%)
Disagree	36.9%		33.8%	
	(40%)		(34.1%)	
Strongly Disagree	12.2%	49.1%	9.2%	43%
	(8.9%)	(48.9%)	(11.8%)	(45.9%)
Corr. Co. = .2644 (.4774)		P = .000 (P = .000)		

During their enterprise activities, students were often required to undertake tasks that normally they would have chosen to avoid. Question A5 therefore asked students whether or not they rushed jobs they disliked.

**Q A5 If I dislike doing a job, I tend to do it quickly to get it out of the way.**

	Before Mini-enterprise		After Enterprise	
	(n = 342)	(n = 79)	(n = 342)	(n = 79)
Strongly Agree	17.2%		15.1%	
	(13.3%)		(14.1%)	
Tend to Agree	42.2%	59.3%	41.7%	56.8%
	(34.4%)	(47.8)	(36.5%)	(50.6%)
Disagree	26.5%		33%	
	(23.3%)		(27.1%)	
Strongly Disagree	14.2%	40.2%	10.1%	43.1%
	(20%)	(43.3%)	(12.9%)	(40%)
Corr. Co. = .3001 (.5748)		P = .000 (P = .000)		

Within their companies, students were required to take instructions from their peers. This required an acceptance of authority from someone other than their teacher or adult other than their teacher (A.O.T.). In this situation, if students were given a task that they preferred not to do, the simplest course of action was simply not to complete the task in question. Question A11 therefore asked students about their attitude to completing tasks after making a commitment to do so.

*"We were virtually on our own. Miss W. (the teacher) did come in, but we had to make all the decisions for ourselves. We weren't told we had to do this or that, we had to decide between the options we had, which was different from normal." (school F)*

**A11 If I say I will do something, I will try to ensure that I complete the task.**

	(n = 346) (n = 73)		(n = 346) (n = 73)	
	Before Mini-enterprise		After Enterprise	
Strongly Agree	32.7%		31.4%	
	(25.6%)		(27.3%)	
Tend to Agree	60.7%	93.4%	60.5%	91.9%
	(54.9%)	(80.5%)	(62.3%)	(89.6%)
Disagree	6.6%		6.9%	
	(18.3%)		(9.1%)	
Strongly Disagree	1.2%		8.1%	
	(1.2%)	(19.5%)	(1.3%)	(10.4%)
Corr. Co. = .2952 (.4584)		P = .000 (P = .000)		

During the investigation, many students welcomed the opportunity to be able to produce work on their own without direct teacher involvement. Question A18 asked about students' attitude to working on their own.

*"That's what I really liked. The teachers stepped back and let us get on with what we were doing." (School C)*

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**Q A18 I usually do my best work when I am left alone to get on with the job.**

(n = 345) (n = 79)		(n = 345) (n = 79)	
Before Mini-enterprise		After Enterprise	
Strongly Agree	35.1% (26.7%)	26.5% (23.5%)	
Tend to Agree	47.5% (43.3%)	82.6% (70%)	52.2% (54.1%)
Disagree	13.9% (15.6%)	19.3% (16.5%)	78.7% (77.6%)
Strongly Disagree	3.5% (3.3%)	17.4% (18.9%)	2.0% (5.9%)
Corr. Co. = .4301 (.4016%)		P = .000 (P = .000)	21.3% (22.4%)

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Some of the tasks faced during a mini-enterprise were complex, particularly for some of the younger students. Presented with such a situation and without the normal access to their teacher, it would have been understandable if students simply gave up. Question A30 therefore asked if students persisted when faced with a difficult problem.

**Q A30 I usually keep working until I find a solution.**

	(n = 343) (n = 72)		(n = 343) (n = 72)	
	Before Mini-enterprise		After Enterprise	
Strongly Agree	16.6%		13.9%	
	(22.2%)		(15.3%)	
Tend to Agree	43.9%	60.5%	51.4%	65.3%
	(48.6%)	(70.8%)	(56.9%)	(72.2%)
Disagree	34.6%		31.2%	
	(25%)		(23.6%)	
Strongly Disagree	4.9%	39.5%	3.5%	34.7%
	(4.2%)	(29.2%)	(4.2%)	(27.8%)
Corr. Co. = .3853 (.4992)		P = .000 (p = .000)		

Conversely, some students thrive on a challenge and Question A34 sought to establish whether students liked challenging tasks.

**Q A34 I like to tackle challenging tasks.**

	(n = 345) (n = 72)		(n = 345) (n = 72)	
	Before Mini-enterprise		After Enterprise	
Strongly Agree	23.7%		21.1%	
	(27.8%)		(34.7%)	
Tend to Agree	59.2%	82.9%	63.9%	85.0%
	(58.3%)	(86.1%)	(54.2%)	(88.9%)
Disagree	15.0%		14.2%	
	(11.1%)		(11.1%)	
Strongly Disagree	2.0%	17.0%	0.9%	15.1%
	(2.8%)	(13.9%)	(0.0)	(11.1%)
Corr. Co. = .4107 (.4423)		P = .000 (P = .000)		

Many of the tasks involved with running a mini-enterprise company, involved students in practical tasks. They were not simply required to theorise about certain situations, but to put their thoughts into practice. Question A44 therefore asked students specifically about their attitude towards tackling difficult practical tasks.

*"Instead of just writing about it and thinking about it, we were actually doing it." (School C)*

**Q A44 When I am given a difficult practical task at school, I try to complete it successfully.**

	(n = 342) (n = 72)		(n = 342) (n = 72)	
	Before Mini-enterprise		After Enterprise	
Strongly Agree	26.8%		30.1%	
	(30.6%)		(29.2%)	
Tend to Agree	67.3%	94.2%	59.8%	89.9%
	(63.9%)	(94.4%)	(61.1%)	(90.3%)
Disagree	5.0%		8.1%	
	(4.2%)		(9.7%)	
Strongly Disagree	0.9%	5.9%	2.0%	10.1%
	(1.4%)	(5.6%)	(0.0%)	(9.7%)
Corr. Co. = .2968 (.4255)		P = .000 (P = .000)		

---

Question A46 asked students how they reacted to being given a position of trust.

*"It's really just not having the teachers coming around telling you what to do. You can really do what you want as long as the whole class agrees with you. It's really the responsibility of doing it for yourself." (school G)*

---

**Q A46 I usually respond well to being given a position of trust.**

	(n = 345) (n = 72)		(n = 345) (n = 72)	
	Before Mini-enterprise		After Enterprise	
Strongly Agree	31.5%		29.2%	
	(22.2%)		(29.2)	
Tend to Agree	57.5%	89.0%	63.0%	92.2%
	(63.9%)	(86.1%)	(56.9%)	(86.1%)
Disagree	9.2%		6.6%	
	(13.9%)		(12.5%)	
Strongly Disagree	1.7%	10.9%	1.2%	7.8%
	(0.0)	(13.9%)	(1.4%)	(13.9%)
Corr. Co. = .3621 (.3179)		P = .000 (P = .007)		

---

## Self Confidence

One of the major differences for students, between working in a mini-enterprise and normal lessons, was the degree of independence they were given. The questions in this cluster attempt to establish how confident students were to adopt this new role.

Question A1 examines the students' attitude towards working with others.

*"I've learnt to work with other people a bit better than I would have done. You have to listen to other people's views and not go ahead and do it on your own." (school G)*

---

### Q A1 I tend to work well with others

	(n = 346) (n = 79)		(n = 346) (n = 79)	
	Before Mini-enterprise		After Enterprise	
Strongly Agree	9.2%		13.3%	
	(18.9%)		(18.8%)	
Tend to Agree	72.5%	81.7%	68.0%	81.3%
	(65.6%)	(84.5%)	(64.7%)	(83.5%)
Disagree	15.6%		16.1%	
	(14.4%)		(16.5%)	
Strongly Disagree	2.6%	18.2%	2.6%	18.7%
	(1.1%)	(15.5%)	(0.0%)	(16.5%)

Corr. Co = .2437 (Not Available)

P = .000 (Not Available)

---

Students are used to having their work assessed by their teachers, but the assessment process is often viewed as part of a developmental process helping students to become self critical of their work. The assessment by the consumer is often more direct and students quickly become aware of any shortcomings in their products or services. Quality control is therefore, an important part of the mini-enterprise and Question A12 asked students whether they



worked better when someone commented on the quality of their work.

---

**Q A12 I tend to work better when someone comments on the quality of my work.**

	(n = 344) (n = 72)		(n = 344) (n = 72)	
	Before Mini-enterprise		After Enterprise	
Strongly Agree	31.9%		30.3%	
	(43.1%)		(36.1%)	
Tend to Agree	46.4%	78.3%	53.8%	84.1%
	(37.5%)	(80.6%)	(45.8%)	(81.9%)
Disagree	17.4%		14.2%	
	(15.3%)		(13.9)	
Strongly Disagree	4.3%	21.7%	1.7%	15.9%
	(4.2%)	(19.5%)	(4.2%)	(18.1%)
Corr. Co = .2050 (.5943)		P = .000 (P = .000)		

---

Questions A16 and A19 have already been detailed above.

The day to day lives of students at college are ordered by timetables, syllabuses etc. Little out of the ordinary happens and Question A24 therefore asked students if they coped well when the unexpected happened.

---

**Q A24 I usually cope well when the unexpected happens.**

	(n = 342) (n = 72)		(n = 342) (n = 72)	
	Before Mini-enterprise		After Enterprise	
Strongly Agree	9.9%		8.9%	
	(8.3%)		(8.3%)	
Tend to Agree	59.4%	69.3%	64.8%	73.8%
	(56.9%)	(65.3%)	(52.8%)	(61.1%)
Disagree	28.1%		22.8%	
	(31.9%)		(33.3%)	
Strongly Disagree	2.6%	30.7%	3.5%	26.3%
	(2.8%)	(34.7%)	(5.6%)	(38.9%)
Corr. Co = .3390 (.2801)		P = .000 (P = .017)		

---

Many students work in classes of mixed gender, but even so, they are not always required to work in mixed groups, and not often in situations when a peer is in a position of authority. Question A25 therefore asked students if they enjoyed working with members of the opposite sex.

In one girls' school, they viewed the lack of boys with mixed feelings:-

*"I think that if we did have boys in the class, if it was a mixed school, it would be much harder because you'd have to have a variety of different things. As well as what girls would like you'd have to have what boys like as well. But then there would be more ideas of different things to do because boys at that age are maybe more imaginative."*  
(school G)

---

**Q A25 I enjoy working with people of the opposite sex.**

	(n = 342) (n = 72)		(n = 342) (n = 72)	
	Before Mini-enterprise		After Mnterprise	
Strongly Agree	27.8%		27.4%	
	(20.8%)		(19.4%)	
Tend to Agree	60.9%	88.7%	63.4%	90.8%
	(54.2%)	(75.0%)	(59.7%)	(79.2%)
Disagree	8.4%		8.9%	
	(23.6%)		(19.4%)	
Strongly Disagree	2.9%	11.3%	0.3%	9.2%
	(1.4%)	(25%)	(1.4%)	(20.8%)
Corr. Co = .4578 (.6475)		P = .000 (P = .000)		

Mini-enterprise companies often require students to adopt roles which place them in conflict with their friends. This can often strain established friendship patterns and requires a degree of confidence on the part of the students involved. Question A27 therefore asked if students felt that they were popular with their peers.

**Q A27 I am generally popular with other pupils.**

(n = 342) (n = 72)

(n = 342) (n = 72)

Before Mini-enterprise

After Enterprise

Strongly Agree	13.7%		9.0%	
	(11.1%)		(19.4%)	
Tend to Agree	73.5%	87.2%	77.1%	86.1%
	(70.8%)	(81.9%)	(66.7%)	(86.1%)
Disagree	10.5%		11.0%	
	(15.3%)		(13.9%)	
Strongly Disagree	2.3%	12.8%	2.9%	13.9%
	(2.8%)	(18.1%)	(0.0)	(13.9%)
Corr. Co = .4698 (.4553)		P = .000 (P = .000)		

Students are used to being told what to do by their teachers in many normal lessons, where as when running a mini-enterprise company they often have to be pro-active. Question A31 therefore asked if students would tackle a task they saw needed doing.

**Q A31 If I see a task that needs doing, I usually tackle it without waiting for instructions from others.**

(n = 343) (n = 72)

(n = 343) (n = 72)

Before Mini-enterprise

After Enterprise

Strongly Agree	9.9%		7.5%	
	(6.9%)		(6.9%)	
Tend to Agree	42.5%	52.4%	42.2%	49.7%
	(36.1%)	(43.1%)	(36.1%)	(43.1%)
Disagree	38.4%		43.6%	
	(50%)		(52.8%)	
Strongly Disagree	9.0%	37.4%	6.6%	50.2%
	(6.9%)	(56.9%)	(4.2%)	(57%)
Corr. Co = .3212 (.3022)		P = .000 (P = .010)		

A mini-enterprise often places students in vulnerable situations as they encounter problems which they have not experienced before and which perhaps require knowledge they have yet to acquire. Students are encouraged to seek advice in such situations and Question A37 asked students if they thought that

discussing their problems revealed their weaknesses.

---

**Q A37 I feel that discussing my problems with others reveals my weaknesses.**

	(n = 344) (n = 72)		(n = 344) (n = 72)	
	Before Mini-enterprise		After Enterprise	
Strongly Agree	14.0%		8.4%	
	(2.8%)		(2.8%)	
Tend to Agree	32.3%	46.3%	38.3%	46.7%
	(34.7%)	(37.5%)	(37.5%)	(40.3%)
Disagree	37.8%		38%	
	(43.1%)		(40.3%)	
Strongly Disagree	16.0%	53.8%	15.3%	53.3%
	(19.4%)	(62.5%)	(19.4%)	(59.7%)
Corr. Co = .3098 (.4605)		P = .000 (P = .000)		

---

During the mini-enterprise experience, there is a variety of situations when students are required to deal with adults in stressful situations.

*"There was a time in a shop when we explained that we were giving 30% of the profit to charity. She (the shop keeper) couldn't understand why we couldn't give 100%. We explained it was for our business and that we were trying to get profits, she didn't seem to understand." (School A)*

Question A40 therefore asked students if they thought that they projected a confident image to the world.

**Q A40 I tend to project a confident image to others**

	(n = 344) (n = 72)		(n = 344) (n = 72)	
	Before Mini-enterprise		After Enterprise	
Strongly Agree	8.1%		7.8%	
	(2.8%)		(5.6%)	
Tend to Agree	57.4%	65.5%	56.4%	64.2%
	(63.9%)	(66.7%)	(62.5%)	(68.1%)
Disagree	29.6%		30.6%	
	(31.9%)		(29.2%)	
Strongly Disagree	4.9%	34.5%	5.2%	35.8%
	(1.4%)	(33.3%)	(2.8%)	(32.0%)
Corr. Co = .3523 (.3437)		P = .000 (P = .003)		

---

## Self Discipline

Question A11 has already been discussed above.

During their mini-enterprise experience, students found a variety of situations where they were unable to proceed as planned. Sometimes this was due to an oversight on their part and on other occasions it might be that others did not take them seriously. Dealing with such frustrations was part of the mini-enterprise experience and Question A21 therefore asked students how easy they found it to control their frustration.

---

### Q A21 I tend to find controlling my frustration difficult.

	(n = 344) (n = 79)		(n = 344) (n = 79)	
	Before Mini-enterprise		After enterprise	
Strongly Agree	13.6%		11.8%	
	(11.1%)		(7.1%)	
Tend to Agree	38.3%	51.9%	34.7%	46.5%
	(31.1%)	(42.2%)	(37.6%)	(44.7%)
Disagree	37.4%		40.5%	
	(27.8%)		(32.9%)	
Strongly Disagree	10.7%	48.1%	13.0%	43.5%
	(10%)	(37.8%)	(7.1%)	(40%)
Corr. Co = .3990 (.7358)		P = .000 (P = .000)		

Many students welcomed the opportunity to work on their own without direct supervision from their teachers. Others found this difficult and Question A28 tried to establish students' attitude towards working without supervision.

---

**Q A28 I usually find it easy to work without supervision.**

(n = 345) (n = 72)

(n = 345) (n = 72)

	Before Mini-enterprise		After Enterprise	
Strongly Agree	24.1%		19.0%	
	(13.9%)		(25%)	
Tend to Agree	54.8%	78.8%	61.7%	80.7%
	(59.7%)	(73.6%)	(52.8%)	(77.8%)
Disagree	18.0%		15.0%	
	(20.8%)		(20.8%)	
Strongly Disagree	3.2%	21.2%	4.3%	19.3%
	(5.6%)	(26.4%)	(1.4%)	(22.2%)
Corr. Co = .3459 (.3750)		P = .000 (P = .001)		

Questions A30 & A31 have already been considered above.

Schools and colleges had differing policies towards what happened to the profits made by student enterprises. Sometimes this was dictated by the model of mini-enterprise used, be it Young Enterprise which took place outside the school day, or a mini-enterprise which was part of the curriculum. Often making money acted as a motivation to students to work hard at their project, they saw it as being work for themselves rather than work for the teaching staff.

*"We put more into it because it was our money and we had to go out and get the materials." (School C)*

Question A49 therefore asked students if they would work hard if they knew that they would be making some money.

**Q A49 I do not mind working hard if I know I am going to make some money.**

(n = 341) (n = 71)

(n = 341) (n = 71)

Before Mini-enterprise

After enterprise

Strongly Agree	51.0%		38.0%	
	(42.3%)		(40.3%)	
Tend to Agree	36.2%	87.2%	44.6%	82.6%
	(33.8%)	(76.1%)	(34.7%)	(75%)
Disagree	9.9%		13.9%	
	(12.7%)		(22.2%)	
Strongly Disagree	2.6%	12.5%	3.5%	17.4%
	(11.3%)	(24%)	(2.8%)	(25%)
Corr. Co = .3561 (.4899)		P = .000 (P = .000)		

## Flexibility

Questions A1 & A24 have already been addressed.

During the course of a mini-enterprise, students often had to acquire new skills and knowledge very quickly to enable them to complete particular tasks. This involved considerable concentration and perseverance. Question A26 therefore asked students if they preferred to learn new skills when they were to be used in a real work task.

**Q A26 I prefer to learn new skills by using them in a real work task.**

(n = 343) (n = 71)

(n = 343) (n = 71)

Before Mini-enterprise

After Enterprise

Strongly Agree	25.2%		25.8%	
	(16.9%)		(19.4%)	
Tend to Agree	62.3%	87.5%	67.2%	93%
	(66.2%)	(83.1%)	(72.2%)	(91.7%)
Disagree	10.1%		6.1%	
	(16.9%)		(8.3%)	
Strongly Disagree	2.3%	12.4%	0.9%	7.0%
	(0.0)	(16.9%)	(0.0)	(8.3%)
Corr. Co = .2286 (.2335)		P = .000 (P = .050)		

The pace of work during a mini-enterprise is different to that of a normal school lesson. Sometimes very leisurely and on other occasions hectic, requiring intense involvement by all students involved. Question A47 therefore asked students if they were at their best in an emergency.

Q A47 I am usually at my best in an emergency.				
	(n = 345) (n = 71)		(n = 345) (n = 71)	
	Before Mini-enterprise		AfterEnterprise	
Strongly Agree	16.8%		13.0%	
	(15.3%)		(11.3%)	
Tend to Agree	43.1%	59.8%	49.1%	62.1%
	(40.3%)	(55.6%)	(42.3%)	(53.5%)
Disagree	32.9%		32.1%	
	(36.1%)		(38%)	
Strongly Disagree	7.2%	40.1%	5.8%	37.9%
	(8.3%)	(44.4%)	(8.5%)	(46.5%)
Corr. Co = .4104 (.5786)		P = .000 (P = .000)		

### Honesty-Integrity-Loyalty

Questions A3, A11 and A46 have all been discussed above.

Most students responded well to being given total control over their mini-enterprise company, others did not and were somewhat irresponsible. Control over the latter group of students was left to the students in the first instance and this cluster of questions sought to establish how students responded to this responsibility. Question B1 questioned students about how they would tackle theft in their companies.



Q B1 On discovering theft of company property I would:-

**Sack all staff**

	(n = 343) (n = 78)	(n = 343) (n = 78)
	Before Mini-enterprise	After Enterprise
1st Choice	0.9% (2.2%)	1.4% (2.4%)
2nd Choice	1.7% (16.9%)	1.4% (14.1%)
3rd Choice	1.4% (3.4%)	1.4% (1.2%)
4th Choice	95.9% (77.5%)	95.7% (82.4%)
Corr. Co = .0842 (.8431)		P = .012 (P = .000)

**Tighten the company's security arrangements**

	(n = 343) (n = 76)	(n = 343) (n = 76)
	Before Mini-enterprise	After Enterprise
1st Choice	24.3% (28.1%)	23.2% (18.1%)
2nd Choice	50.1% (48.3%)	50.1% (42.2%)
3rd Choice	24.3% (21.3%)	25.2% (33.7)
4th Choice	1.2% (2.2%)	1.4% (6.0%)
Corr. Co = .2044 (.2177)		P = .000 (P = .059)

**Discuss the problem with my staff**

	(n = 345) (n = 78)	(n = 345) (n = 78)
	Before Mini-enterprise	After Enterprise
1st Choice	56.9% (48.3%)	65.9% (57.6%)
2nd Choice	25.7% (25.8%)	20.2% (24.7%)
3rd Choice	16.2% (18.0%)	12.1% (10.6%)
4th Choice	1.2% (7.9%)	1.7% (7.1%)
Corr. Co = .2421 (.3840)		P = .000 (P = .001)

**Plan a way of catching those responsible**

(n = 343) (n = 78)

(n = 343) (n = 78)

**Before Mini-enterprise****After enterprise**

1st Choice	18%	9.6%
	(11.2%)	(15.3%)
2nd Choice	22.3%	28.4%
	(32.6%)	(31.8%)
3rd Choice	58%	61.2%
	(53.9%)	(49.4%)
4th Choice	1.7%	0.9%
	(2.2%)	(3.5%)
Corr. Co = .2449 (.2898)	P = .000 (P = .010)	

**SUMMARY - On discovering theft of company property I would:-****Before Mini-enterprise****After Enterprise****Sack all staff**

1st Choice	0.9%	1.4%
	(2.2%)	(2.4%)

**Tighten the company's security arrangements**

1st Choice	24.3%	23.2%
	(28.1%)	(18.1%)

**Discuss the problem with my staff**

1st Choice	56.9%	65.9%
	(48.3%)	(57.6%)

**Plan a way of catching those responsible**

1st Choice	18.0%	9.6%
	(11.2%)	(15.3%)

Some companies, particularly those that operated after school indicated that punctuality was a problem. Question B2 asked students how they would cope with staff lateness.

Q B2 If staff were consistently late for work I would:-

**Dismiss them after several warnings**

(n = 343) (n = 78)

(n = 343) (n = 78)

Before Mini-enterprise

After Enterprise

1st Choice	11.6%	11.0%
	(3.4%)	(5.9%%)
2nd Choice	57.7%	60.6%
	(55.1%)	(50.6%)
3rd Choice	20.6%	15.7%
	(27%)	(25.9%)
4th Choice	10.1%	12.8%
	(14.6%)	(17.6%)

Corr. Co = .2960 (.4283)

P = .000 (P = .000)

**Discuss the cause of the problem with them**

(n = 345) (n = 78)

(n = 345) (n = 78)

Before Mini-enterprise

After Enterprise

1st Choice	84.4%	85.8%
	(85.4%)	(80%)
2nd Choice	13%	10.4%
	(14.6%)	(16.5%)
3rd Choice	2.0%	3.5%
	(-)	(3.5%)
4th Choice	0.6%	0.3%
	(-)	(-)

Corr. Co = .1042 (.3401)

P = .053 (P = .002)

**Arrange for all employees to start later**

(n = 343) (n = 78)

(n = 343) (n = 78)

Before Mini-enterprise

After Enterprise

1st Choice	1.2%	1.7%
	(9.0%)	(8.2%)
2nd Choice	11.6%	13.9%
	(21.3%)	(23.5%)
3rd Choice	37.4%	37.1%
	(31.5%)	(34.1%)
4th Choice	49.9%	47.2%
	(38.2%)	34.1%)

Corr. Co = .2770 (.5695)

P = .000 (P = .000)

### Ignore the problem and hope that things would improve in time

	(n = 343) (n = 78)	(n = 343) (n = 78)
	Before Mini-enterprise	After Enterprise
1st Choice	2.9% (4.5%)	1.7% (7.1%)
2nd Choice	18% (25.8%)	14.2% (16.5%)
3rd Choice	40% (33.7%)	44.3% (37.6%)
4th Choice	39.1% (36%)	39.7% (38.8%)
Corr. Co = .2651 (.4009)		P = .000 (P = .000)

### SUMMARY - If staff were consistently late for work I would:-

	Before Mini-enterprise	After Enterprise
<b>Dismiss them after several warnings</b>		
1st Choice	11.6% (3.4%)	11.0% (5.9%)
<b>Discuss the cause of the problem with them</b>		
1st Choice	84.4% (85.4%)	85.8% (80.0%)
<b>Arrange for all employees to start later</b>		
1st Choice	1.2% (9.0%)	1.7% (8.2%)
<b>Ignore the problem and hope that things would improve in time</b>		
1st Choice	2.9% (4.5%)	1.7% (7.1%)

## Motivation

Students were generally well motivated during their mini-enterprise experience often working well beyond normal lesson times in order to complete various tasks for the company. A number of possible reasons have been suggested for this and some are addressed by questions within this cluster.

Questions A1, A2, A5, A12, A18, A28, A30 and A49 have all been addressed in previous sections above.

Question A36 asked students if they worked better when they had competition.

---

**Q A36 I tend to work better when I have competition at school**

	(n = 346) (n = 72)		(n = 346) (n = 72)	
	Before Mini-enterprise		After Enterprise	
Strongly Agree	24.6%		19%	
	(27.8%)		(15.3%)	
Tend to Agree	35.3%	59.98%	3.06%	55.0%
	(27.8%)	(55.6%)	(30.6%)	(45.8%)
Disagree	32.9%		36.9%	
	(33.3%)		(44.4%)	
Strongly Disagree	7.2%	40.1%	8.1%	45.0%
	(11.1%)	(44.4%)	(9.7%)	(54.1%)
Corr. Co = .4075 (.4099)		P = .000	(P = .000)	

---

**Leadership, Negotiating, Delegation and Organisational Skills**

Mini-enterprise experiences are thought to provide opportunities for students to develop a number of specific inter-personal skills commonly used in commercial and industrial contexts. Questions A1, A7, A17, A19, A21, A29, A36, A40, B5 and B6 have been discussed in previous sections above.

Question A20 asked students if they found it difficult to deal with people who were angry.

**Q A20 I find it difficult to deal with people who are angry**

(n = 344) (n = 79)

(n = 344) (n = 79)

**Before Mini-enterprise****After Enterprise**

Strongly Agree	20.0%		15.3%	
	(18.9%)		(16.5%)	
Tend to Agree	40.6%	60.6%	43.1%	58.4%
	(51.1%)	(70.0%)	(43.5%)	(60.0%)
Disagree	28.4%		31.2%	
	(24.4%)		(37.6%)	
Strongly Disagree	11.0%	39.4%	10.4%	41.6%
	(5.6%)	(30%)	(2.4%)	(40%)
Corr. Co = .2906 (.2887)		P = .000 (P = .010)		

Question A39 sought students reactions to the premise that the person with the loudest voice made the best leader.

**Q A39 I feel that the person with the loudest voice often makes the best leader**

(n = 346) (n = 72)

(n = 346) (n = 72)

**Before Mini-enterprise****After Enterprise**

Strongly Agree	9.0%		5.5%	
	(6.9%)		(5.6%)	
Tend to Agree	10.4%	19.4%	10.7%	16.1%
	(6.9%)	(13.9%)	(4.2%)	(9.7%)
Disagree	35.0%		31.7%	
	(36.1%)		(40.3%)	
Strongly Disagree	45.7%	70.7%	52.0%	83.7%
	(50.0%)	(86.1%)	(50.0%)	(90.3%)
Corr. Co = .3098 (.5496)		P = .000 (P = .000)		

Many mini-enterprise companies failed to address the need for good communication and consequently encountered adverse reaction from their work force. This sometimes took the form of trade union type activity where students copied actions they had experienced through the media.

Question B12 asked students what they thought was the best way of ensuring that a company didn't have problems with trade unions.

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**Q B12** The best way to ensure that the company doesn't have problems with trade unions is to:-

**Persuade the workers to sign an agreement not to go on strike**

	(n = 338 ) (n = 78) Before Mini-enterprise	(n = 338 ) (n = 78) After Enterprise
1st Choice	16.8% (14.4%)	19.1% (10.7%)
2nd Choice	22.4% (24.4%)	21.7% (27.4%)
3rd Choice	36.8% (31.1%)	35.9% (31.0%)
4th Choice	24.1% (30.0%)	23.2% (31.0%)
Corr. Co = .2029 (.2097)		P = .000 (P = .065)

**Ban the trade unions from operating in the company**

	(n = 339) (n = 78) Before Mini-enterprise	(n = 339) (n = 78) After Enterprise
1st Choice	6.5% (14.4%)	8.4% (9.5%)
2nd Choice	13.8% (21.1%)	16.8% (26.2%)
3rd Choice	28.8% (25.6%)	26.0% (28.6%)
4th Choice	50.9% (38.9%)	48.8% (35.7%)
Corr. Co = .2549 (.3692)		P = .000 (P = .001)

**Pay the workforce well**

	(n = 338) (n = 78)	(n = 338) (n = 78)
	Before Mini-enterprise	After Enterprise
1st Choice	16.5% (15.6%)	13.3% (19.0%)
2nd Choice	44.7% (35.6%)	42.3% (29.8%)
3rd Choice	22.9% (33.3%)	27.2% (28.6%)
4th Choice	15.9% (15.6%)	17.1% (22.6%)
Corr. Co = .2531 (.4321)		P = .000 (P = .000)

**Enable all employees to voice their concerns to the management on a regular basis.**

	(n = 339) (n = 76)	(n = 339) (n = 76)
	Before Mini-enterprise	After Enterprise
1st Choice	60.1% (47.7%)	59.4% (51.9%)
2nd Choice	19.1% (27.3%)	19.1% (28.4%)
3rd Choice	11.4% (11.4%)	10.7% (8.6%)
4th Choice	9.4% (13.6%)	10.7% (11.1%)
Corr. Co = .3307 (.2437)		P = .000 (P = .034)

**SUMMARY - The best way to ensure that the company doesn't have problems with trade unions is to:-**

	Before Mini-enterprise	After Enterprise
<b>Persuade the workers to sign an agreement not to go on strike</b>		
1st Choice	16.8% (14.4%)	19.1% (10.7%)
<b>Ban the trade unions from operating in the company</b>		
1st Choice	6.5% (14.4%)	8.4% (9.5%)
<b>Pay the workforce well</b>		
1st Choice	16.5% (15.6%)	13.3% (19%)
<b>Enable all employees to voice their concerns to the management on a regular basis.</b>		
1st Choice	60.1% (47.7%)	59.4% (51.9%)



## Teamwork vs. Working for Oneself

For a large part of their work at school or college, students are required to work individually. Sometimes they come together to work in small groups, but even on these occasions they are required to produce a personal record of their work within the group. Mini-enterprise work encourages students to work together for the good of their company and the questions within this cluster sought student views on the different methods of working.

Questions A1, A10, A35, A37, A 43, B5 and B6, have all been covered above.

Question A15 asked students if they thought a job could be more easily done when more people were involved.

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**Q A15 A job is usually done more easily when many people are involved.**

	(n = 343) (n = 72)		(n = 343) (n = 72)	
	Before Mini-enterprise		After Enterprise	
Strongly Agree	14.5%		13.6%	
	(23.6%)		(16.7%)	
Tend to Agree	41.0%	55.5%	39.3%	52.9%
	(40.3%)	(63.9%)	(38.9%)	(55.6%)
Disagree	36.0%		40.5%	
	(29.2%)		(36.1%)	
Strongly Disagree	8.4%	44.4%	6.6%	47.1%
	(6.9%)	(36.1%)	(8.3%)	(44.4%)
Corr. Co = .3915 (.4626)			P = .000 (P = .000)	

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## Initiative

The question of student initiative is associated with motivation and has therefore been addressed in Questions A18, A28, A30, A44 and B11 above.

### Being Able to Cope with Failure

During the course of a mini-enterprise, students would often rise to the challenge and establish a company which was an outstanding success for many different reasons. However, just as some succeeded, so a few failed to achieve their objectives which could lead to problems when students had to come to terms with their company's failure. Questions A10, A12, and B18 have been dealt with above.

Question A42 asked students if they were self critical of their work at school.

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**Q A42 I tend to be self critical of my work at school**

	(n = 344) (n = 71)		(n = 344) (n = 71)	
	Before Mini-enterprise		After Enterprise	
Strongly Agree	16.8%		22.0%	
	(11.1%)		(9.9%)	
Tend to Agree	50.0%	66.8%	49.0%	71.0%
	(55.6%)	(66.7%)	(49.3%)	(59.2%)
Disagree	27.7%		26.4%	
	(30.6%)		(38.0%)	
Strongly Disagree	5.5%	33.3%	2.6%	29.0%
	(2.8%)	(33.4%)	(2.8%)	(40.8%)
Corr. Co = .4057 (.2946)			P = .000 (P = .013)	

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### Appreciation of the Needs of Others

Although working as a team was often a new experience, many students reacted well. They quickly recognised and utilised any talents within the group, and assigned students to specific roles where existing expertise could be utilised. Some students had no immediate skills or knowledge to contribute and had to make their contribution in other ways. Some mini-companies

handled this task assignment better than other and the questions within this cluster investigate student sensitivity to the needs of others within the group.

Questions A1, A8, A10, A13, A14, A17, A20, A35, A43, B2, B5, B6, and B12 have already been addressed in previous sections above.

## **CHAPTER 6**

### **Discussion of the findings of the Study**

The aims of the present study were detailed in chapter three and the purpose of the current chapter is to consider the implications of the data collected from the questionnaires and the semi-structured interviews held with students and their teachers on these aspects of mini-enterprise work in schools.

#### **Knowledge of Financial Matters - Financial Planning**

Many people consulted during this research identified 'learning how to make and control money' as a key feature of mini-enterprise companies. Without exception, the use of money was one element which distinguished the mini-enterprise activity from the students' other lessons and it certainly gave a sense of purpose to the students' planning activities.

Many students in secondary school have experience of part time work before they leave school. (Mizzen 1992) Nevertheless, all the students questioned said that they welcomed the opportunity of working to make money in school. Many were motivated, in the short term, by the notion of personal gain, but many others agreed from the outset, to donate any profits made to worthy causes. Whatever the underlying motive for making money, it did provide students with a graphic 'performance indicator' of both their own effectiveness and their company's financial performance. Company profitability and survival are two performance indicators used by the Department of the Employment to indicate the success of a small business. (cited in MacDonald & Coffield 1991, p. 157)

The major mini-enterprise models place considerable emphasis on collecting information to inform decision making, for example, by conducting market research and acquiring information to assist in product design and manufacture.

(MESP 1987, pp. 16/17; Young Enterprise - Achievers Handbook, 1987) Such activities enabled students to consider various aspects of financial planning, potential turnover, overall costs, potential profit margins, and in doing so, many companies were able to establish that certain products would be prohibitively expensive for them to manufacture.

*"I was the production manager for the first half of the year and we had a few slight mistakes ... well we bought too much of something at a price which was too high and we couldn't sell them" (school B, p. 5)*

*"It (mini-enterprise) helped you realise the importance of keeping a balance sheet up to date, because if you didn't you either had not enough money, or you have too much." (school D, p. 4)*

*"To do one tee shirt, it took so long to actually go through the computer programme and to get it on the thing and to get the video camera to focus on something. It took quite a time, I think we were a bit ambitious. If we had more time and a better print out, we might have done something. Made a profit." (school F, pp. 5-6)*

The questionnaire therefore sought to establish whether participating in a mini-enterprise encouraged students to become more active in collecting such data prior to making important financial decisions. (QA32) Surprisingly, the reverse seems to be the case. Students who had participated in a mini-enterprise company, were reluctant to spend time collecting information or involve themselves in planning activities generally. Many companies didn't have a business plan and in some, even the costing of products and services was approached in a haphazard way.

*"In the beginning we all sat round and thought of products, and thought, wouldn't it be good if we could make this but it was a bit extravagant and we realised that we didn't have the capabilities so we were a bit more careful." (school A, p. 1)*

It was therefore, not surprising to see only a third of the students involved in mini-enterprise indicating the importance of market research to the development of action or business plans. When interviewed, few companies saw the production of plans as being particularly important, and they were often pro-

duced only to satisfy some course work criteria (School H - mini-enterprise was conducted as part of a GCSE Business Studies Course), or to satisfy the bank manager that his money was to be put to positive use.

*"To get the money we had to have an interview with the bank manager and we had to make or case, it wasn't, (pause) if they didn't think we could sell it because we didn't do enough market research they wouldn't have just said 'O.K.' A lot of groups they told to go back."*

*"We also took our business plans and we had write about two pages and that looked good. And Chris took in an example and took in our posters that we had sketched out. And we just talked about how we were going to make it and what we were going to need. How we had done our research and things like that. We got it (the loan) straight away." (school D, pp. 7-8)*

This reluctance may be due to several factors, some more obvious than others. The duration of the mini-enterprise varied from school to school. For example, of the twenty schools involved in the study, 15 ran for half a term or less. Students were anxious to start work, which for many of them, meant selling their products or services, and found it frustrating to have to spend a great deal of time discussing and planning what their company would be doing. As they were operating for a very short time, conducting a formal market research exercise in the limited confines of the school was seen as an academic exercise, as any information gathered in this way could be gleaned through their daily informal contacts with fellow students.

*"We advertised on the back of the bags (used to wrap the company's product) and we also put an advert in each block." (school C, p. 14)*

*"We went into an assembly and showed them what we were doing there. After that our orders really went up." (school C, p. 14)*

*"We did some research and found out that it would be really expensive to do the dyes and things and we asked people around the school whether they'd be interested and they didn't seem very enthusiastic about it." (school A, p.6)*

There was also the added risk that their activities would have revealed company plans to competitors operating in the same environment, as in the case of schools A ,B, C, D, & I.

*"... most of them (students) thought that it (mini-enterprise) was going to be a lot more exciting, a lot more hatching plots against each other and that sort of thing." (school B, p.2)*

The two most popular ways of funding mini-enterprise, were selling shares or obtaining a loan from the bank. Both methods failed to represent a true picture of the real world of business to the students. Although several major banks became involved at local school level, few if any, charged more than a notional sum of interest for the loans made, and few imposed bank charges on mini-enterprise companies transactions. When on one occasion a company was charged by the bank for operating their account, the teacher involved became extremely annoyed and threatened to stop using the bank's services, even though the students thought the charge was in order. In reality, such charges are crippling to many small businesses and the banks' attitude to loan and overdraft facilities to small business, has been the subject of heated debate during the past year (1991). Finance, particularly during the start up phase of a new business, is vital and the lack of capital is often found to be the reason for eventual business failure. (MacDonald and Coffield 1991 p.154) Data from the questionnaire indicated that whilst most students saw banks as a good source of capital, they were extremely naive when it came to the requirements of the bank prior to granting a loan facility.

The cursory manner in which bank personnel examined business plans detracted from one of the essential planning functions involved, both in mini-enterprise and other newly established small businesses. The setting of arbitrary ceilings for loans, irrespective of company needs and before the presentation of business plans, served to reinforce the notion that it was simply an intellec-

tual exercise rather than a function of sound business planning. Students resent being presented with tasks that merely keep them occupied (Cullingford 1991, p.100), and such an obviously bogus task, cannot but detract from the potential for learning in this critical aspect of financial planning. Fortunately, many students were undeterred by such restraints, and argued their case for the funds they believed their company needed if it were to succeed.

The data collected in this study suggests, that the involvement of banks at this critical learning stage is sometimes less than positive. They have an excellent opportunity to influence the attitudes of many students involved in mini-enterprise at a formative stage in their education. However, the data seems to suggest that many of their staff continue to perpetuate short term attitudes toward loans and overdrafts, for which British banks are frequently criticised and which is often given as a reason for the failure of British industry to capitalise on innovative ideas.

## **Research Activities**

Many students decided to produce products or services which necessitated research to ensure both the safety and legality of their products.

*"In our company we had to make perfumes to mix using ethanol and we had to get permission from the Customs and Excise before the school could sell us some. Even when we could get the permission we were still not allowed to buy any as it was against the law. I'm not sure what we were supposed to do about that, so they gave us some and we donated some money to the school." (school H, p.2)*

Other companies faced the problem of competition from commercial organisations, such as the school meals service and had to ensure their products conformed to health and safety standards.

*"When were setting out to sell the stationary we had a list made up but we later found out that some of the items on the list we would not be able to sell, such as Tipex." (schools H, p.3)*



*"We wanted to sell sweets ..... We couldn't do that because at break times the cooks in the hall they sell doughnuts and that sort of thing" (School E, p.5)*

However, not all students were reluctant to engage in research and planning activities. Some companies spent a considerable amount of time collecting data to inform their decisions and contrasted this with the normal situation in lessons where they are given a selection of solutions to choose from or are told exactly what to do.

*"We were virtually on our own. Miss W did come in, but we had to make all the decisions ourselves. We weren't told we had to that, we had to decide between all the options we had, which was different from normal" (school F, p.3)*

When responding in the questionnaire approximately 40% of the mini-enterprise students (up 3% after the mini-enterprise experience) identified the importance of market research in fixing the prices customers are willing to pay for products and services. (Q B20)

This seems to support the suggestion that students are frustrated by the restriction of time, as many of them clearly understand the need for sound planning and research when asked outside the context of their mini-enterprise company. They are however, reluctant to act on this knowledge when they perceive such activity as taking them away from involvement in the practical aspects of running their company.

### **Raising Capital for Mini-Enterprise Companies**

Clearly all mini-enterprise companies require capital, and students tended to raise this in one of three ways. By obtaining a loan, by selling shares or by personal funding. Those students involved in Young Enterprise were directed towards the selling of shares. Those using the MESP model tended to have more freedom to select the model they preferred. Both schemes have the backing of major banks (National Westminster & Midland) and this influence

is embedded in the support literature supplied. (Young Enterprise Kit 1987, and Mini-Enterprise in Schools Project Booklet 1987 - both have since been up-dated)

Despite the emphasis on preparation and planning, it was disappointing to find that little consideration was given to matching the type of business to the means of raising the capital necessary to finance the operation. Not surprisingly perhaps, approximately 40% of the mini-enterprise students (down 4.6% after the mini-enterprise) favoured banks as the best means of raising the money required to finance their business. (Q B13) However, the procedures used were far from realistic. Where schools were able to use personnel from a local bank, students were required to produce business plans which were discussed during an interview prior to the granting of a loan. The conditions relating to the loan varied. Normally schools fixed a maximum figure for the loan irrespective of the need identified in the business plan, which, as has previously been mentioned, had in some cases, the effect of limiting the business activities open to students.

*"At the beginning , Mr. P. said he would be giving loans of no more than £5.00 or £6.00 but we thought we needed £25.00 to buy the materials with, so we just sort of went for it and got the loan." (school D, p.7)*

No company raised their capital from more than one source; from personal contributions, shares and a bank loan; which would have been an obvious way of extending their opportunities. The mini-enterprise companies seemed to be blinkered when it came to raising capital, unable to look beyond the 'preferred' method advocated by their teachers or advisers. In one case a company didn't consider obtaining a bank loan, even when they were experiencing temporary cash-flow difficulties, preferring instead to sell more shares, even though this was particularly cumbersome.

*"... I don't think we could hav asked for a loan. .... And eveyone thought it would be better to sell more shares and have less net profit than go and get a loan from the bank."  
(school A, p.4)*

When students did obtain a loan, the conditions attached to the loan were unrealistic. Few understood how loans would be secured (Q B19), or thought that banks would be interested in seeing the previous years accounts, but felt that information about how the loan was to be used and potential profits would be more important.

Whilst students generally responded to the responsibilities of using other peoples' money well, there was always the belief that if everything went wrong they could simply walk away from the problem. Whilst this may well be true in the context of the mini-enterprise company, it is far from the reality of business life and therefore gave students an unrealistic view of financial transactions in business.

Using shares as a method of funding was strongly advocated by Young Enterprise and was also used by some of the other mini-enterprise companies. It had the considerable advantage of spreading the financial liability if the company failed to prove a financial success. Unfortunately, some students were given an unrealistic view of their responsibilities to shareholders. Few held shareholders meetings of any kind, nor did they issue reports during the operation of the company. In one case students were advised against repaying money to their shareholders by their advisers, as each shareholder would receive a fraction of their original investment and it would be difficult to arrange repayment. This distressed one of the students who referred to the practice as 'legal but not ethical'. (school B, p14)

The students' responses in the questionnaire (Q B19) are perhaps indicative of their confidence to be able to persuade the bank to lend them the money they require and perhaps, a naivety as to the realities of commercial banking.

The student interviews suggest that these attitudes are re-enforced by the bank personnel participating in mini-enterprise schemes.

**Was there any problem, did you manage to persuade a bank manager to give you some money?** *"No not really, Kim's a good talker. (school C, p.4)*

*"When they (the teachers) were telling our parents all about it before it began, well my mum was a bit late and so she took home a leaflet and it gave you the impression that they (the bank) would lend you about £50.00. So my mum when we came to add up what we needed wasn't surprised that it came to £25.00. When we came back from school, they said about £10.00 was the average. My mum couldn't believe it, that you could make a business out of £10.00. So my mum said, go for it, even if other people are getting £5.00 loans, if you make a good case and present it well you should get it." (school D, p.8)*

In some cases, teachers, or adults other than teachers, acted as the bank manager and judged student business plans using educational rather than strictly business criteria.

*"I think the teachers if they really, really wanted us to pay back the loan they wouldn't do this scheme in the first place because ... because they trust us its O.K. but there must be times when people don't pay back their loan. It was important for us because we had such a big loan and the money needed to be there for next year." (Schools I, p.7)*

The offer of a grant of £40.00 from the National Westminster Bank, also confused the relationship between the mini-companies and the bank, because in some cases it became absorbed into the company's income and consequently affected their balance sheets.

Student responses in the questionnaire (Q B13) suggest that they understood that investing in business was a financial risk. They were therefore more likely to favour using other peoples' money rather than their own, unless they believed their company would be an unqualified success.

*"We had to put all the time and the money in, the £20.00 and all the effort in, therefore what we earn we ought to be able to keep. We kept down the amount of money we paid in wages to make the company a success and now we are told we cannot keep the profits." (school H, p.4)*

Certain aspects of raising capital for mini-enterprise companies were clearly beneficial, schools C, D (reported above) and G all found negotiating with the bank a positive learning experience.

*"I just liked the experience really, working with other people, handling money, the interview with the bank manager." (school G, p.2)*

*"Well we asked Miss S. (the teacher) if we could take the loan and she asked the bank manager who ever it was, to come in and he came in and discussed it with us, and we told him how much we wanted, for how long and how our company was going to be run and how we were going to pay him back." (school C, p.4)*

One group singing their company jingle to impress the bank manager,

*"My parents think it's a good idea (mini-enterprise) because it generally helps you make decisions with the class and I have been known to take some of the work home with me. Because we did a song for the bank manager, actually we have done three songs for the bank manager. **Does he appreciate them?** He thinks they are funny. Sometimes he thinks they are good and sometimes he thinks they could be worked on a bit more. My mum and dad generally think it's very good." (school G, p.11)*

and the others producing detailed management plans indicating the need for specific minimal level of funding. (School C, reported above) In one case (School D, reported above) the sum required was more than twice the maximum figure specified by the school's headteacher.

Most of the students were aware of their responsibility to either the bank or the share holders, and saw paying back their loans as a priority.

*"I think it was important to pay back the loan for us, because we had a lot of money and we were confident that we could pay it back. There was a time when I thought we wouldn't but we did." (School I, p.6)*

## **Keeping Financial Records**

As the money involved in the mini-enterprise companies which generally came from either banks or investors of one sort or another, accurate financial records were essential. The questionnaire (Q B15) suggested that students

saw such records as necessary to prevent the company selling at a loss (mini-enterprise group 28.4%, which rose to 31.4% after the mini-enterprise) and to ensure that they could produce accurate tax returns (mini-enterprise group 31.4%, which rose to 34.5% after the mini-enterprise), although few saw it as a means of preventing theft from the company. (mini-enterprise group 17%, fell to 16.3% after the mini-enterprise)

The questionnaire data suggests that students understand the need for activities they were reluctant to engage in during their mini-enterprise experience. Few mini-enterprises were obliged to pay tax of any kind, nor were their accounts externally audited. This made the need to keep accurate financial records less of an imperative than it would have been in a normal business. Despite this, few students reported any theft from their company, the only obvious references to unexplained financial dealing being at Schools B, J and A.

*"We had a lot of members (leave the company), a lot at once and that made us think of giving up for a while. But we decide not to and we had .... when the first managing director left we found that we had £41.00 worth of unpaid bills, which he hadn't told anyone else that we had received." (school B, p.8)*

*"I think there was about £30.00 that wen missing .... I don't know" (school A, p.2)*

*"...some kids they came along and stole a whole box of Drifters and there was four of them and only one of our lads who couldn't really do anything." (school J, p.5)*

Students usually took their financial records extremely seriously, going to great pains to ensure they had accounted for every penny.

*"It was a bit boring filling it (the balance sheet) in all again, the whole of the balance sheet. Because our balance sheet was about one and a half pages of A4, it was quite long. We mucked it up somewhere in the middle, we had entered in something wrong, or we added it up wrong or something and we had to do it all again working it out on a calculator making sure that it was right." **When you say, we had to, what do you mean?** "Well, we had to work out how much profit we had, and how much money we were going to give to .... The teachers wanted to see the balance sheet so, we had to do it correctly anyway." **I am curious about this. If I gave you this balance sheet to do as an exercise, and you made a mistake, you'd feel pretty bad about doing it again wouldn't you? And I wonder how you felt about it because YOU decided to***

**do it again?** *"You'd have to do it again because you have to keep the business going. If you got it wrong it would let the business down partly. (School D, p.4)*

## **Costing Products and Services**

The student costing of products and services in many cases was poorly considered, usually being guided by what students thought the market would stand rather than establishing what their costs were, and pricing the products or services accordingly.

*"We had a problem getting our sweets 'cause we got a load of sweets which were £2.00 a jar then we made a load of bags which we sold for £4.00, a 100% profit. But when we went for some more they didn't have any and we had to get another load of sweets and we didn't make as much profit on it." school C, pp. 5-6)*

*"We decided that they would be 50p to sell but I don't know how much they were to make." (school A, p.2)*

*"I think we would have done a lot better if we had worked out how much material we needed in a lot of detail. We had meetings in the morning and we'd discuss how much money we had and how we could make a profit. But often people would go to other meetings and we couldn't discuss things properly." (school H, p.8)*

Some students did attempt to price their products or services accurately, but because their markets consisted largely of fellow students, friends and family, they tended to lower their costs and subsequently experienced financial difficulty. This provided an interesting contrast to the student responses in the questionnaire. (Q B20 part 4)

Few students fully understood the concept of 'overheads', and few were required to pay realistic overheads for premises and equipment they used. Indeed, some felt that such payment would not be warranted.

*"Because it we are in school, we took it for granted that we would have the card for free, that we would use the blenders for free but I'm sure if we had to pay for it still would have worked because we had plenty of profit and we could have paid for them." (School G, p.16)*

Few mini-enterprise companies mentioned paying tax, students at school H were required to pay corporation tax levied at 40% of declared profits, with the alternative of this sum being donated to charity. (school H, p.4)

Many students said that they were motivated by the prospect of making money:

*"We saw last years company made some money out of it, so that was one of the reasons for doing it, the thought that we might make some money." (school A, p.5)*

*"I liked the selling best because I got money for it." (school C, p.2)*

**What did you like best about taking part in mini-enterprise?** *Selling the products we made and making money. (school D, p.1)*

but in some case the question of what would happen to any profit made was not clear. School G took the view that any profits should go to a charity, one student explained:-

*"We are not going to keep the money because its really a bit selfish because we don't really need the money, its people who are researching, or people who have something wrong with them that need the money, not us." (school G, pp. 12-13)*

On the other hand, students at school E were particularly annoyed that they couldn't have a share of the profits and that their views were overridden by their teacher.

*"We wanted to share the profits out between us all, but miss didn't want to, she just wanted to put it in the bank and leave it there." (School E, p.6)*

### **Student Control of their Mini-Enterprise Company**

In some cases, students complained that they had little control over their own company's direction. Sometimes this was because the teacher overturned decisions made by the students, or brought excessive pressure to bear.



*"The other group with X as adviser had too much pressure put on them in getting out reports and that. He came into lessons and started shouting at them because they hadn't got some things printed. .... The M.D. would be trying to run everything and she might say: right lets start to work, and he'd say: 'Just a minute, don't you think you ought to do this or that.' He didn't advise, he told." (school A, p.7)*

*"She (the teacher) played a very prominent part in it actually. She said go home, do some homework, decide on a name and make plans for it. We come back gave her our ideas of what we thought and she come out with 'Mini-co', she'd worked out where we sell, what we were making, where we get all the goods and all the things like that, which I don't think she is supposed to do, but she thought she was helping." (school E, p.4)*

In other cases this was because friendship groups voted together.

*"I'm still not very friendly with some of the people but I can get on with them if I need to. **So that is something you learnt from the Y.E. experience?** After one or two arguments at the start. But you can still show that when it comes to a vote, people tend to cluster into groups. **You mean they don't consider the decision they vote along friendship lines?** To some degree. But they look at the decision and that's formed the friendship because they are all voting on one side so they get slightly more friendly as they work together." (school A, pp.6 - 7)*

In both cases this indicated insecurity or lack of confidence.

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**Table 5 Operational Life of Mini-Enterprise Companies (n = 20)**

Duration	Number of Schools
Less than two weeks	1
Half a term	14
A Full Term	2
Two Terms	1
Two and a Half Terms	1
A Full Year or More	1

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The teachers were anxious that their students did well and were keen to provide support, finding it difficult to step back and become facilitators. The mini-enterprise was often a high profile activity both within the school and the local

community, and keenly watched by, parents, governors, the senior management of the school and others in the local community. This put a certain pressure on the teaching staff responsible for the mini-enterprise to ensure success.

The claim made by exponents of mini-enterprise, that students have a 'clear sense of ownership of their learning whilst participating in a mini-enterprise', cannot be confirmed without some qualification. In some mini-enterprise companies visited during the research students did have ownership of their learning, in others, students were still closely supervised by their teachers. However, supervision and ownership are relative terms, and where students were subject to supervision, the teachers involved would probably argue that they were less directive during the mini-enterprise than normal lessons.

*"What happened at the beginning the teacher said; 'Now you can go into your groups. We don't put you into groups, you find out.' 'Cause after the paper hats (a simulation exercise played out before the mini-enterprise began) you knew who worked and who mucked around so we chose those who were good at maths and who could make stuff and those who could sew and write, so we just went on from there." (School C, p.7)*

Many students were therefore particularly sensitive to peer group pressure, particularly the younger students. The suggestion that peer group pressure acts as a powerful incentive to student learning was generally confirmed in the findings of the study. In some cases this was a positive feature enabling student to achieve work of high standards, in other cases it prevented development in the mini-enterprise companies.

### **Resource Management Skills**

As in the case of most commercial companies, the single most important resource at the disposal of all the mini-enterprise companies was their labour force. Working together in groups on a specific task, was a novel experience for many students who were more accustomed to working by themselves.

Therefore the management of mini-enterprise companies presented perhaps the most daunting challenge to the students involved.

The Young Enterprise model recommended the election of certain key 'officials' necessary to the company organisation, managing director, secretary, personnel manager etc. Other mini-enterprise models tended to leave the organisation more open. Meetings and discussions were essential elements of the company's organisation and students tended to find them difficult, and there were, not surprisingly, many heated arguments

**What things did you argue about?** *"What we were going to order, who was going to be on the stall first and things like that, because our group was so big there were times when people were rubbing edges with each other and there were quite a few arguments." (school H, p.6)*

and sometimes even desertions.

*"And they made some hats they thought were good but they weren't good at all and they couldn't sell but it was really difficult to tell them." Particularly as one of them was in quality control and they kept on going off and wanting to join another group." (school I, p.4).*

However, despite these problems, students indicated, both in the questionnaire (Q A14) and the interviews, that they saw the process of discussion as a vital part of decision making in their mini-enterprise companies.

The students were inexperienced at taking their own decisions in school, and some were even ridiculed when they conducted market research in the playground.

*"Some of the boys from the second year were running around saying: 'It's a con' and 'Don't buy it, it will fall apart', and things like that (school D, p.3)*

It is therefore understandable that they should vote in 'friendship groups' as this ensured a measure of security. They were also anxious to show that they could make their company a success without help from either the teachers,

or AOTs, and because they had a stake in the company it was essential for them to work together to ensure such success.

## **Marketing in Mini-Enterprise Companies**

Marketing was not always a strong feature of the mini-enterprise companies and they didn't always conduct their market research, or their advertising campaigns well. This was possibly because they enjoyed a captive market within the school, or amongst their friends and relatives when they went home. Very few sought to take their products and services into the wider community.

Despite their reluctance to become involved in market research activities, most students clearly saw, or were encouraged to see, the need to canvas the opinion of potential customers to guide their product design, or establish the need for a particular service. (Question B8, part 1, mini-enterprise group 79.1%, up 0.6% after the mini-enterprise) Interestingly, in the questionnaire they placed more value on establishing potential demand for their products or services, than they did for attempting to influence the market by creating a monopoly position, or through advertising. This point was dramatically made by the response to the value of television advertising in the promotion of a product by the mini-enterprise group, when they had completed their mini-enterprise. This difference may reflect the fact that few mini-enterprise companies have access to television coverage and therefore thought the notion rather fanciful. However, school B were shocked by the success of a rival Young Enterprise company which was reported in the press,

*"I know we had quite a shock when we visited X college and saw how well they were doing." **You say you were shocked. Why were you shocked?** "Well ... there was an article in the paper saying they had made a profit which was double or treble ours and they seemed to be making a very limited product but they seemed to be making a good job of it. It was a high quality product. Things seemed to be going quite well. But they were older than us." (school B, p.8)*

and school I did receive local television and press coverage of their activities. Few examples of advertising campaigns were specifically discussed during the student interviews, although most mini-enterprise companies seemed to use posters to promote their products around the school, and school G did attempt to use jingles on some occasions. (mentioned above)

## **Competition**

There were however, some indications in the present study, that a practical experience of running a mini-enterprise did have an effect on the perceptions of the students, and this can be seen in some of their responses in the questionnaire when the mini-enterprise group is compared with the control group of students. (e.g. Q B6 c, Q B5a, Q B1c, Q 9a, Q 10c, & Q 18b)

Competition in the real business world is intense, but students running a mini-enterprise company in school are often sheltered by a very close knit and relatively sympathetic market place. This may be necessary and desirable for educational reasons, but it fails to present the harsh realities of the business world to students, particularly those who may have ambitions to start their own business when they leave school. Therefore, whilst the responses to questions in the questionnaire indicates that students have a fair understanding of many aspects of business, follow-up questions in the interviews indicated that students did not consistently apply the knowledge they had gained from the other subjects they studied at school, to their work in mini-enterprise. Consequently, the assertion made by advocates of mini-enterprise that the application of concepts and knowledge in work simulations helps students to see the relevance of other subjects in school, could be confirmed only with major reservations. It suggests that if schools wish to establish meaningful links between the mainstream curriculum and mini-enterprise activities, the need to involve as wide a

range of teaching staff (and AOTs) as possible to overcome this form of 'business myopia'.

### **The Use of Profits for Future Developments in Mini-Enterprise Companies**

Few of the mini-enterprise companies visited had any form of long term business plan, largely due to the way they were established within the school's curriculum structure. For this reason perhaps, most of the students viewed all the money they made as profit and gave little thought to re-investment into product development or company marketing activities. The response from School G, one of the few examples of a long term mini-enterprise interviewed, illustrates how the mini-enterprise companies tended to neglect the management of their money once it had been placed in the bank.

**What happened to the profit?** *"Its all gone into the bank. Straight in and when we want some money for a new project we just go and get some out."* (school g, p. 12)

Student attitudes towards the use of the profit made by their mini-enterprise companies revealed by responses in the questionnaire (Q B10) are interesting. Students certainly didn't see making money for the owner of the company as being particularly important. (only 8.5% of the mini-enterprise group, 9% after the mini-enterprise) This contradicted the view expressed during the student interviews, where many students saw making money for themselves as being particularly important. In the questionnaire, mini-enterprise students supported the notion of investing in research and development (43.9%, 37.7% after the mini-enterprise) and ensuring company stability (26.9%, 33.9% after the mini-enterprise) as the two major reasons for creating profits.

However, few of the mini-enterprise companies visited used their profits in research and development activities, although this may have been because most of them existed for only a short period of time. Students interviewed in

school G, clearly saw profits as providing a financial buffer in times of hardship and used them as and when necessary, for future product development.

There was little opportunity for students participating in a mini-enterprise to see the relationship between healthy profits and stable employment, since few of the mini-enterprise companies paid their workforce. Although long term employment was not an intended to be a feature of the mini-enterprise, the question of stable employment in business was clearly discussed by the students during their mini-enterprise experience, and some extreme views did emerge. For example, one student from school E suggested that competition from his mini-company might help motivate school meals staff.

*".. if we had done it (sold sweets etc.), they (the kitchen staff) would have realised what they were doing wrong and they would have bought the same things in and different things. So they would make more profit and we would lose out." (school E, p. 6)*

### **Customer Service in Mini-Enterprise Companies**

Parts of the questionnaire focused on company organisation and customer service. (Q B11 & B 17) Students indicated their preference for establishing a good rapport with their customers and trying to ensure that company organisation was as efficient as possible to enable it to respond to customer demand.

Many of the mini-enterprise companies had to face the problem of being unable to satisfy the demand for their product or service:

*"I don't think we would take orders again. We had so many orders we just couldn't make enough to fill the orders." (school C, p. 14)*

*"We went around asking people if they wanted to buy one of our hats, that was when we had something to show them. On other days we couldn't because we didn't have any to sell." (school I, p.8)*

and this often reflected the pattern of work organised by the school. Where mini-enterprise companies operated over a longer period, it was possible for students to gear up for particular events, such as a Christmas Fair or a parents' evening. In companies with a much shorter life span, students were obliged to sell as they produced, which in some cases meant that they created a demand they could not satisfy. This in turn created problems obtaining the raw materials required to sustain production. Often companies suffered delays in obtaining materials from wholesalers, and in some cases, alternatives had to be used.

*"Well, where we were getting the hats from first of all, they said that they couldn't get them ..... Well the shop said that they were going to get some more in of a different type so we got those instead." (School I, p.2)*

### **Quality Assurance in Mini-Enterprise Companies**

Ensuring the quality of the products produced and the services offered by mini-enterprise companies was a constant problem. The data from the study indicated that the students frequently lacked the specialist skills required to manufacture particular products, and could ill afford either the time required to develop the necessary skills, or the materials wasted gaining such expertise.

*"Part of the course (mini-enterprise) was that we had to pay rent to the teachers or whoever's building we had been using and we had to pay wages and things like that. So it did actually cost us to use the equipment. We lent it (the computer equipment) off the the art teachers, but the tape was quite expensive. It was £15.00 wasn't it? Yes, but it was quite a lot out of what we had raised. It just sort of went wrong (School F, p.6)*

In the questionnaire, (Q B17) students indicated that they felt that the implementation of a system of quality control together with the offer of some form of guarantee was the best way of maintaining quality. (mini-enterprise group 38.1%, 41.6% after mini-enterprise) They were not attracted to the idea of 'building in quality' to their products at the design stage, and only about half of the enterprise group saw any value in providing courses for their workforce



on quality, some form of 'Total Quality Management'. Conversely, two thirds of the control group thought this to be a good idea.

The latter figures were perhaps to be expected, as the concept of mini-enterprise companies has been criticized because of the tendency to produce simple 'low tech' products which tend to be of poor quality. (Wragg 1991, HMI 1990) During student interviews, a vast range of products and services produced by the mini-enterprise companies were viewed and discussed. In some cases the company acted as little more than a retailer.

*"We made packages to put envelopes and paper in and we dealt with a company that deals with the school. We did bookmarks and pens and pencils as well." (school E, p.1).*

Others offered services which were using state of the art technology (School F, mentioned above), although not always with great success! In several interviews students discussed their problems relating to ensuring the production of a quality product. (schools I, an F mentioned above)

*"The workforce, the people who were designated to make them. (hated the mirrors) We came up with designs and everyone was all enthusiastic at first and then when it got down to people getting the materials and bringing in on time and to cut the wood and sand it and break the mirrors, there were a lot of breakages there. We had a lot of frustration getting the mirrors on to the wooden surface, we stooped to car body surface at one point it was suggested by one of the advisers, it failed miserably so we went back to glue and paper. It was just that we were making them throughout the whole year and we got sick of the sight of mirrors of making them, of the design and everything." (school A, p.3)*

Most were aware of the problem and tried to improve quality by appointing a quality control inspector. Such a position was fraught with difficulty as it often came down to one student telling a friend, that their work wasn't up to scratch. (School I, mentioned above) In some cases the students were unable to improve matters because they didn't possess the skills to produce the goods or services they had planned to sell and they didn't have enough time to learn

them. In this climate, lectures or courses on total quality management were inappropriate.

This aspect of mini-enterprise clearly presents a problem for teachers and AOTs wishing to ensure that students retain ownership of the mini-enterprise. To ensure the success of mini-enterprise, teachers and AOTs must enable students to take control of their company and the learning process associated with the experience. Insensitive direction or control over product design and quality would both detract from the learning experience and possibly cause student resentment. (eg. Schools A and H mentioned above) When students offered their products for sale in the wider community, the harsh realities of the market place often made the need for quality far more effectively than the mini-enterprise advisers could.

*"We wrote out a list of all the companies in X and then some of us went round in the holidays and told them what it (the mini-enterprise) was all about and showed them the mock programme and showed them where the space was and told them about the prices and then went back a couple of days later to see if they were interested." **What was their reaction to you?** "Some didn't think we were genuine because we looked too young, others thought well they're at school we'll help them." (school A, p.1)*

The data from the study indicated that although students often marketed products that were not of merchandisable standard, they were nevertheless, purchased by apparently appreciative and supportive parents and friends. This is worrying for a number of reasons.

First, it provides students with a damaging role model, one which leads them to believe that customers will buy 'any old rubbish'. This is clearly totally unrealistic, and unacceptable in the real commercial world. (Reid 1989, p.17) Secondly, it does not encourage them to examine the mechanisms that can be adopted to 'build in' quality to their work. If learned in the very practical way during a mini-enterprise experience, there is at least the likelihood that the

knowledge would be transferred to other work, both in school and outside in other activities.

The data from the study seems to support the view that mini-enterprise products are a 'rip off', and that students are simply trading on the sympathy of others (Wragg 1990), and also provides evidence to support the assertion made by Johnson (1990) that:-

*"... developments in Britain are stymied by the low standards expected of our young people."*

However, it is hardly surprising that young people have such low expectations if they are given the kind of unrealistic feedback described above, which is not atypical for students involved in mini-enterprise. If students were more frequently encouraged to market their products and services in the wider community, their work could be easily compared with concrete examples of the work of others in the 'real' commercial world. As a result of the lack of this form of objective criticism, students in mini-enterprise companies saw quality as something remote from manufacture, something that could be dealt with at the end of the production process if necessary. Few saw value in attempting to improve quality by improving their skills and knowledge, or enhancing the perception of all company members, by introducing the notions of, 'Quality Circles' (QCs) and 'Total Quality Management.' (TQM) Both concepts would fit well into the mini-enterprise context.

Collard defined TQM as being:

*"A cost effective system for integrating the continuous quality improvement efforts of people at all levels in an organisation to deliver products and services which ensure customer satisfaction." (Collard & Sivyrs 1990)*

A policy of TQM if adopted, would benefit, not only the mini-enterprise company, but clearly have implications for the attitudes of students towards their studies in all aspects of the curriculum.

Robson suggested that QCs were:

*"... a group of people of about four to ten in number working under the same supervisor who meet once a week to identify, analyse and if possible suggest solutions to work-related problems." (Robson, 1982 cited in Sutcliffe & Pollock 1992)*

This is already an integral part of both Young Enterprise and Mini-enterprise procedures, but few, if any, of the companies in the current study were able to exploit the technique to improve quality and lower the degree of frustration experienced by company members. Although the mini-enterprise meetings did enable students to enjoy a sense of ownership of their company.

The failure to exploit the potential of TQM and QCs, could be a problem directly related to the length of the mini-enterprise experience, but even in those companies that operated over long periods, few companies attempted to address the issue of quality through training.

### **Student Ownership of the Mini-Enterprise Experience**

The question of students controlling their mini-enterprise companies has been discussed above. However, whether or not students controlled their learning is a separate issue. Providing opportunities for students to take control of their learning and do something practical with it, was certainly one of the most positive features of mini-enterprise identified in this study. Student responses in the questionnaire indicated that they felt that adults did take them seriously and the response was more positive when they had completed their mini-enterprise. (Q A3) In practice, the relationship between teachers, AOTs and other adults, was sometimes less positive. Some, as in the case of School A, (p.1,

mentioned above) were occasions when students experienced first hand the uncertain relationship between the manufacturer and the retailer. Often the company representative is made to wait for the attention of a buyer, and even then, a sale is not achieved. However, the same company also experienced the most blatant intrusion by a teacher encountered during this research.

*"X came into one of their lessons and started shouting at them because they hadn't got some things in to be printed. And if someone is in from the area board he'd glare at them (the students) to make sure that people thought that everything was wonderful. The MD would be trying to run everything and she might say, right let's start to work*

*and X would say, Just a minute don't you think we ought to do this or that?" (school A, p.7))*

In other schools, teachers and AOTs went out of their way to ensure that the students had ownership of their company and the mini-enterprise experience. School I renamed teachers consultants and the organiser said, that she was reluctant to interfere in company business except in the case of health and safety issues. (middle school teacher, Appendix 7b, p.147)

Encouraging students to apply their studies in practical situations is one of the elements in the RSA's 'Education for Capability' programme (1980 - 91). In the campaign brochure, Charles Handy suggested:

*"Learning is not finding out what other people already know but solving our own problems for our own purposes by questioning, thinking and testing until the solution is part of our life." (Handy 1989, cited in RSA 1990)*

The RSA Educating for Capability campaign, restated the case for promoting a range of teaching and learning styles to ensure students are prepared for the technological advanced world of work that will exist in beyond the year 2000. (RSA 1991, p.6) The present study confirms their view that many teachers have adopted such approaches in the context of mini-enterprise. However, many people, both within and outside the profession remain sceptical. As Bell suggests;

*"A major reason for this that there are many examples where experiential learning activities have ill defined aims, and are insufficiently structured by the teacher. In addition, the learning outcomes are hard to ascertain, frequently because there has been no attempt to produce evidence of learning through a process of assessment." (Bell 1991, p.6)*

The data collected in this study suggests that the mini-enterprise models have excellent potential for experiential learning opportunities, and are well able to deliver the forms of experience advocated by the Educating for Capability project. However, the data also supports the assertion that many teachers need to define their aims more explicitly, and present a clear structure of learning, if students are to benefit from their mini-enterprise, and convince others of the value of the experience.

The decision making problems encountered by mini-enterprise students have implications for the organisation of both the mini-enterprise itself, and other potentially related curriculum activities in schools. With out doubt, mini-enterprise activities did give many students ownership of the decision making processes involved, what seemed to be missing, was an appropriate time allocation and support structure to enable students to solve all their problems successfully. Although mini-enterprise could make a significant contribution to part of the National Curriculum through the Economic and Industrial Understanding (EIU) cross-curricular theme (NCC 1990, p.44), the lack of a more coherent approach to mini-enterprise in schools seems to support the view of Jamieson (1991, p.56) that, despite recent government (DES 1991) and Business (CBI 1991) commitments, EIU is not a significant part of any student's curriculum in the secondary school.

Students interviewed in this study clearly saw their mini-enterprise company as a true reflection of companies operating in the 'real world'. A few students were able to develop tenuous links between their work in the mini-enterprise company, and other subjects in the curriculum. Sadly however, throughout

the study there seemed to be numerous opportunities to integrate mini-enterprise into various parts of the curriculum, which teachers and students failed to exploit. The formal structure of the time-table and the pressure of external demands such as examinations, seemed to militate against a more comprehensive integration. However, if TECs are to promote curriculum development and enterprise (Devon & Cornwall TEC, 1991) then mini-enterprise, along with work experience, the work of education/business partnership activities and Compacts, all have the potential to provide students with a valuable bridge linking their studies in school with that of the world of work.

### **Company Management - Posts of Responsibility**

In the questionnaire, students did see the need for someone to be in control of their company, but they did not find it easy to take on positions of responsibility, and during the interviews, they often related examples of role conflict. (Q A 19)

*"I was M.D. but I helped out with other things as well. If I had one specific role I think it would have been harder because in other companies they had to stick to their specific roles even though they may have wanted to do something else," (schools H, p.3)*

*"We also had problems with the quality control. Well, she's (a fellow student in charge of quality control) not here now, but we had problems with the staples and she wasn't firm enough, because there were several people in her form and ... things weren't glued in properly and so we had to discuss that really. After the meeting she was firmer. **Did you think this helped you to see the difference between, friends and people who work together? You said she wasn't firm enough, presumably this was because she was your friend?** I think she did that because we were her friends and she didn't want to hurt our feelings, but ... I think she didn't what was wrong with it because I think she didn't want to split the group. She didn't think she had the right to say it." (school I, p.2)*

Students had to learn to resolve disagreements if their company was to be successful. The questionnaire indicated that students found the mini-enterprise experience useful in developing their powers of persuasion (Q A17)

It was difficult to confirm these results during the student interviews because clearly if everyone thought they could persuade their colleagues that their ideas were best, the result could be total pandemonium, particularly in the large mini-enterprise companies such as school G. Some students were appointed to positions because other members in the company thought that they had special skills, they were good at mathematics therefore they should be the accountant etc.

*"Well, like the financial adviser was decided by who was good at maths and things like that, and the advertising manager, who was good at art and the production manager who was good at keeping books and that. The administration who was good at typing, it was who suited which job best." (school H, p.3)*

There were however examples of companies appointing students to positions of authority and ensuring that everyone became involved.

*"We voted Lucy in because she did help but she is one person who doesn't come out in anything so we thought we'd give her a chance this time." (School G, p. 6)*

Students were thereby able to demonstrate skills in a way that had not been previously been possible. Alternatively, they could be encouraged to develop a range of important skills that they lacked. By taking the responsibility for the development of their company, students were obliged to adopt a code of self discipline if the company was to succeed. The data collected during this study therefore, generally confirmed the view that mini-enterprise helps to encourage, if not promote student self discipline.

Once again there is a conflict of objectives in the mini-enterprise organisation. If the main objective is to give students 'ownership' of the learning process and for teachers to step back from an organisational role, then the students preponderance to fit fellow students with recognised skills, to specific roles is consistent with that objective. If however the objective is to provide a learning



experience through mini-enterprise, assigning roles according to skills already held by students could be considered counterproductive.

### **Advice from Teachers and Adults Other than Teachers (AOTs)**

In the questionnaire, the majority of students said that if they were in doubt about anything they would seek advice from others. (Q A10) One of the features of many mini-enterprises is the use of AOTs, to bring a realistic dimension of business into the classroom and their experience is thought to be particularly useful to students tackling the problems encountered in a mini-enterprise. In the questionnaire, (Q A16) just under half the students said that they found it difficult to talk to strangers. This figure only improved marginally after the students had completed their mini-enterprise, which suggested perhaps, that the AOTs were less effective as advisers than expected. It was difficult to expand on this finding during the student interviews. There were examples of students who found the presence of AOTs helpful:

*"This was a retailer who came in and gave us some examples of stationary and he was telling us how much we would have to pay for it and how much we could charge for the stuff." (school H, p.7)*

whilst others found their presence odd, if not intrusive.

*"They did keep us in control and told us when we were slow and we were getting behind with things like registration and forms and things. And they did nag us a bit on that." (school B, p.7)*

For some their presence provided an opportunity to present their business ideas to the 'real' world.

**Who were the advisers?** *"They came from British Gas, IBM, IBA and LloydsBank. Each company had their advisers, at first they were general advisers then each company had its own." (school A, p.6)*

## The Development of Communication Skills During Mini-Enterprise

One of the more obvious differences for students between mini-enterprise and their normal lessons, was that during the mini-enterprise students were encouraged to work with other students and they often had to negotiate with their teachers and other adults to achieve their goals, rather than simply following the directions of others. They did not always find this process easy.

However, data from the questionnaire seems to suggest that students found the mini-enterprise experience improved their communication skills (Q A29), and there was considerable evidence during the student interviews that some emphasis was given to presentation and interpersonal skills during mini-enterprise sessions.

*"The worst bit was the presentation. When everyone had to go up and it was your turn. It was all good experience though." ....*

*"The bit I hated most was going to that final meeting. Getting everything prepared and I kept on thinking; 'hat if I make a mess of it, what if I make a mess of it."*

*"Your the one who didn't have to say anything, it was me! I was the managing director, I was the one who had to tell them that we made a loss." (school F, p.2)*

Often students were required to make formal presentations to share holders, or keep a daily log of their activities.

*"We had to write a daily record, a bit of a diary, I found that a bit of a hassle sometimes. It was good but I forgot that the teachers read it and sometimes they would see me the next day and say, they were glad I got over the problem, and I didn't know what they were talking about." (school I, p.11)*

In the school environment, it is unusual for students to be required to organise themselves and work in a team with other students. This may be common in commercial organisations, but it was not easy for the less gregarious students, or those who preferred to work on their own.

In the questionnaire, (Q A38) the majority of mini-enterprise students said that they believed that it was important to be frank with workmates and that they did not mind sharing their ideas with fellow students in their mini-enterprise company. (Q A43)

Many of the mini-enterprise companies involved a small number of students who were often friends. This gave little opportunity for students to keep ideas to themselves, and perhaps more opportunity for students to offer their opinion(s) than is normally possible in a classroom situation with large numbers of students present. Of the mini-enterprise companies interviewed, School G seems to be the exception to the norm in this respect, and the students went to great lengths to ensure all were involved as has been described above.

### **Knowledge of Company Life**

One aim of schools introducing mini-enterprise, was to provide an opportunity for students to gain an insight into the operation of a commercial company. Many students in year 10 in secondary school are able to obtain such an insight from a work experience but such opportunities vary in quality, as reported by students in the interviews.

**Did you find the Young Enterprise experience more useful to you than the work experience?** *"It depends where you went on your work experience. If you went to an office and just made cups of coffee then Y.E. would be better. If you went to a computer firm and actually used a computer and you want to use computers in your job, then it would be better to go on work experience."*

*"When I went on my work experience I ended up making the tea and generally running around for other people and I thought,; what's the point of that I'm not learning anything ... I know what people do when they're a dog's body. I can make tea. So I was pretty fed up when they said ... 'Well, can you make tea?'; and I looked at them and said ... 'Of course I can make tea'. When you go into a company and they say; 'Can you do so and so ... I usually say no because I have not had the opportunity of doing so before."*  
(School B, p.5)

To investigate how useful students felt a mini-enterprise experience was in the development of their attitudes toward life in industry and commerce, several questions in the questionnaire focused on this area.

Students generally thought that they would have to work hard in industry (Q A33) but this attitude softened when they had completed their mini-enterprise. This change in attitude may be due to the fact that the mini-enterprise experience provided a practical illustration of the various demands facing employees in commercial companies, from decisions in the boardroom, to 'graft' on the shop floor. AOTs might also have been able to discuss aspects of their daily work routines with the students providing additional information.

During the interviews, many students commented on the amount of paper-work involved in the running of their mini-enterprise company.

*"Its hard work. A lot harder than I thought it would be. I thought that it would just be practical work making things, but there were a lot of decisions to make and paper work to do." (School I, p.4 )*

In the questionnaire they were asked if they thought that working in an office was easier than working in a factory. (Q A48) There was a significant shift of opinion of those students who believed life in the office was easier, after they had completed the mini-enterprise. Having experienced the practical realities of office work first hand, many students realised the work was not as easy as they had believed it to be. Once again, the control group responded in a similar manner to the enterprise group.

The questionnaire results appear to suggest that the students were reassured by their experience of working in a mini-enterprise company and whilst many found it hard work, the experience was tolerable if not enjoyable.

*"Its hard work, a lot harder than I thought it would be. I thought that it would just be practical work making things, but there were lots of decisions to be made and paper work to do." (school I, p.4)*

The control group response, which in many cases, tended to mirror the enterprise group, is interesting. Whilst one can only speculate about the cause of such shifts in opinion from students who lacked the experiences of the mini-enterprise group, they may well be due in part to students observing and discussing the work of their peers. For, whilst they were not intimately involved with the daily operation of a mini-enterprise company, other students within the school or college could not fail to be aware of the work, and its impact of those students who were involved, as many were customers of their goods and services.

Comment has already been made on the student reaction to the paperwork generated by mini-enterprise companies. Some company models placed great emphasis on correctly completed documentation, others left decisions about such matters to the students. Interestingly, some companies seemed to create a bureaucratic structure which caused some degree of resentment amongst the students.

*"It seemed that the management were stuck up in one place doing a lot of work ... paper work and we were in another place making these stupid mirrors. Animosity built up because we were down here slogging away on bits of wood which wouldn't go right and they were up ther and we didn't know what they were doing (school A, p.3)*

Most students preferred to be active and didn't seem to view planning and book-keeping to be as important as manufacturing.

### **Mini-Enterprise and the Development of Self Employment Opportunities**

One of the anticipated outcomes of the government promotion of enterprise, was to promote the growth in the number of small businesses. Therefore one might reasonably expect that a positive experience of working in a mini-enterprise company at school might well act as a catalyst for this development. Certainly in the questionnaire, over 40% of all students 'strongly agreed' with

the statement that they would enjoy working for themselves. However, enjoying the prospect, and making it a reality are two quite different things. In a recent study of sixth form student attitudes to starting their own business, almost a quarter said that it was either 'Likely', or 'Very Likely', that they would run a business eventually, and only a third thought that the prospect was 'Unlikely', or 'Not at all Likely'. (Curran and Blackburn 1990, p.36) This data might be slightly speculative, and there is no clear indication in the study of what is understood by 'running a business'. Interestingly however, Curran and Blackburn's study also found that:

*"The involvement of a school in Young Enterprise or Mini-Enterprise appeared to have no significant general influence on the attitudes of the respondents towards business ownership. In those schools involved in these schemes, 26% thought it 'likely' or 'very likely' that they would run their own business compared with 24% of respondents not having any involvement. In general terms, therefore, the impact of involvement in Young Enterprise or Mini-Enterprise appears not to go beyond those people actually participating in the projects." (Curran & Blackburn 1990 p. 38)*

Curran and Blackburn's sample contained a high number of students who were described as 'academic achievers,' and unfortunately no specific comparison was made between students participating in mini-enterprises *within* each school.

Much of the data collected in the certain aspects of present study indicated little, if any, difference in the attitudes of mini-enterprise students to those of control groups. Therefore drawing on the data from both studies it would appear that the influence of mini-enterprise companies on student attitudes toward owning their own business is minimal. It is likely that all students are influenced by a range of factors including media coverage, parental occupation and social class. A simulated experience of running a company may therefore simply confirm attitudes that have already been formulated.

However, given the experience of people entering the Enterprise Allowance Scheme (EAS) (MacDonald and Coffield 1991), the lack of a clear understanding of the need and value of forward planning when creating a business illustrated in this study shows perhaps, one area of weakness in the work related curriculum that needs to receive more attention in future. It is imperative that students fully understand all the financial obligations of a small business, particularly the overheads, which are so often overlooked by mini-enterprise companies. The lure of the profits made during a mini-enterprise may persuade school leavers unable to find work, that they can easily start up their own business and make a handsome return. The reality for young people participating in EAS is quite different, often leading to failure and financial difficulties. (MacDonald and Coffield 1991)

### **Manufacturing Methods**

One dilemma facing the student in mini-enterprise was that although they would prefer to be active, to be making a product or performing a service, they often lacked the skills or knowledge to do so productively. In some cases this forced students to produce the 'low level' goods and provide basic services, that have already been mentioned. If the aim was to enable students to encounter the problems of business first hand, then the complexity of the product or service is of little significance. School H, used an idea which they bought 'off the shelf' from a commercial concern. However, many mini-enterprise models stress the importance of original ideas for products and services which doesn't necessarily mirror the reality of the commercial world, and places unnecessary hurdles which some students have little time to overcome. Many commercial concerns capitalise on the ideas of other companies, or exploit perceived 'gaps' in the market, and it may be more profitable (and realistic) for mini-enterprise companies to be encouraged to do the same.

The questionnaire attempted to establish student attitudes towards the manufacturing process. Three quarters of the mini-enterprise students said that they enjoyed making things (Q A23) although, in contrast to the control group, this figure dropped slightly after they had completed their mini-enterprise. This may reflect the pressure of producing goods and services to a high standard in a short time frame. Students preferred to work on products or services that they were familiar with. (Q A9) This is hardly surprising, as it has already been stated, that in most cases they lacked either the time or the expertise to develop new products or services.

In the questionnaire, students indicated that they would try to complete practical tasks they were set at school, (Q A44) and this was certainly supported by their responses in the interviews, which seemed to indicate that those students participating in a mini-enterprise enjoyed practical work and were well motivated. The study therefore seems to suggest that students prefer active/experiential opportunities to didactic approaches when learning about business. However, most mini-enterprise companies ran for relatively short periods of time and given the frustrations of producing products with limited practical skills, student attitudes might well be different if they had to operate their companies over longer periods.

### **The Use of Production Lines in Mini-Enterprise Companies**

Speed and quality of production, seemed to be two common problems that faced mini-enterprise companies.

*"I think we wanted more time, it's not just the money but for learning more about it. 'Cause we learnt quite a bit in the short time but if we had more time we would do it better." (school C, p.5)*

The questionnaire indicated that the majority of students were aware of the benefits of establishing production lines to improve their speed of production



(Q B9) but the level of agreement declined slightly after they had completed their mini-enterprise. This may be explained by the student reactions in the interviews when they implied that they found production line work repetitive and boring, preferring to work on a product from beginning to end.

*"We even started doing things on a circuit, someone cut the ears someone cut the eyes one painted them, we just went mad we couldn't make enough." (school C, p.14)*

This is not altogether unexpected, and confirms the reaction of workers in industry. What the students failed to realise perhaps, was that as the production process becomes more complex, so it becomes increasingly more difficult for workers to become proficient at all aspects of the production process. Added to this, the time required for training increases and the likelihood of errors in manufacture.

One aspect of production lines that might have been particularly attractive to students, was that repetition did enable individuals to become competent at specific tasks, and thereby improve the quality of their products. Indeed, the questionnaire revealed a significant rise in the number of students participating in mini-enterprise who felt that quality was improved by using production lines when compared with the control group. This suggests perhaps that their experience of manufacturing had demonstrated, in a very practical way the improvements in quality possible when employees became an expert in certain aspects of production rather than a generalist in all aspects.

The cost cutting benefits of production lines in manufacturing industries are well known. However, after completing a mini-enterprise, students responses were significantly less positive about the cost cutting benefits of production lines compared with the control group, than they were before they started. This may reflect student experiences during their mini-enterprise, or

be another reflection of their reluctance to spend time planning their company activities.

### **Sales Techniques used in Mini-Enterprise Companies**

For some students, the opportunity to make money was important, but when interviewed, most students said that learning about how companies operated to make money was not the only reason for them participating in a mini-enterprise company.

**So what did you actually learn from it (the mini-enterprise) then?** *"How to work ... not just with your friends but to pick a team and work with the team not arguing or anything."*

*"Instead of just writing about it (business) and thinking about it, we were actually doing it. If you did it from a book you wouldn't have to do it for yourself you could just think ... oh those people are doing that - and thing like that. But when we were actually doing the company you had to think about everything you did and whether it was going to make money or lose money" (school C, p.3)*

Learning about business, and how to make their company succeed, were as important as producing healthy profits.

### **Mini-Enterprise Activities in the School Curriculum**

Despite the opportunities identified by many educationalists (Jamieson et al. 1988) and industrialists (Marsden 1989, p.60) interested in enterprise in schools, the study identified few examples of specific links between the activities of mini-enterprise companies and other subjects in the curriculum. Students often lacked any in-depth technological information and skills to produce anything more than simple, low value products which retailed at comparatively low prices. In some cases, they resorted to a retailing operation with no manufacturing input at all. They had, in effect, to resort to enterprises that made use of their enthusiasm, their low, or non-existent, labour

costs, and the lack of realistic overheads, to make their companies financially viable.

Sadly the lack of skills and technology in the mini-enterprise companies appears to be an accurate reflection of the economy in Britain, described by Ashton (1992) and others. Jamieson for example, suggests that the economy in this country is:-

*"... remorselessly 'low tech'. It is a model for cheap, low quality production using relatively low skilled workers. It looks vulnerable both to high technology and to countries with low labour costs." (Jamieson 1991, p.7)*

Success, however measured in a mini-enterprise, must encourage students to consider setting up their own business when they leave school (MESP 1987, p.2) It is therefore, not surprising to find a similar situation in the those companies established under the Enterprise Allowance Scheme (EAS) to those found in the mini-enterprise companies in this study. MacDonald and Coffield (1991) discovered:

*"Original business ideas were scarce and only one or two people actually mentioned the details of their proposed business as a reason for starting up. Most businesses .... were not in any way out of the ordinary and involved very common, traditional ideas." (MacDonald & Coffield 1991 p.98)*

The fact that many mini-enterprise companies (and EAS) companies, operated in the service rather than the manufacturing sector of the market, again reflecting current economic trends, ( Miller et al., 1991, p.65) and seems to support the view that there is a lack of emphasis in the secondary phase of education, on the development of specific skills, a feature specifically identified by Prais and Beadle in their examination of pre-vocational schooling in the UK and the rest of Europe. (Prais & Beadle, 1991) It may also be an expression of the continuing divide between practical and academic studies in the education system documented earlier in this study. Sir John Harvy-Jones suggested:

*"All of us know that academic knowledge is not enough. What is needed is the capacity to make things happen and this requires a broader concept of education." (Harvey-Jones, quoted in RSA 1991)*

There is considerable evidence in this study that mini-enterprise has the potential to make a significant contribution to the marriage of the academic and practical activities, if the Core and Foundation subjects of the National Curriculum adopt the concepts outlined in the National Curriculum Economic and Industrial Understanding Cross Curricular Theme (NCC 1990), and develop the role of mini-enterprise in this context.

## **Learning Styles**

The interviews held with students during this study confirm the findings of HMI (1990) that students enjoy working in mini-enterprises. However, Jamieson (1990) cautioned against confusing, 'enjoy' and 'prefer' with, effective and productive learning. Rogers (1985, p.389) suggested that you cannot teach anyone anything, you can only provide the environment to learn. In the present context what perhaps students are indicating, is that they *prefer* the context provided by mini-enterprise to that found more commonly in the normal classroom setting. The data collected from both the questionnaire (Q A26) and the student interviews in the study, confirms that when asked, students generally said that they preferred working in the work related context of a mini-enterprise in preference to their other lessons.

Industrialists are clear about their expectations, Reid for example stated:

*"In our recruits we are not looking for knowledge, we are looking for mastery of the processes by which knowledge can be acquired and a maturity and sympathy gained from exposure to the mainstreams of intellectual thought." (Reid 1989, p.18)*

Mini-enterprise certainly provides opportunities for students to experience these processes, and it provides a framework within which students can ex-

exploit the knowledge gained from their other activities, both in the school curriculum, and those undertaken out of school.

## **Experiential Learning in Mini-Enterprise Companies**

Most students during the interviews, were very positive about being given the opportunity to learn about the work of industry through participation in a practical way, rather than having to read about it in books.

*"I think it was good because it was a change and in the four years we have been at this school the lesson got a bit tedious doing the same thing each week, so having a change, not like humanities studying maps and that, it gave us a break."*

*"It was much more enjoyable, but then we didn't have to copy loads of pages out of books and get tied down on that and we didn't have much homework to do. Well, you had a choice. You didn't have to do it if you didn't want to." **Can I press you on what was most enjoyable about it?** "Well making things" (school D, pp. 4-5).*

Students engaged in a range of practical activities involving skills from various subjects in school and from student experiences in out of school activities. Some were extremely confident that they could utilise 'high tech' equipment to provide goods and services, others were happy to reproduce articles made by other mini-enterprises in previous years.

*"And there was 'Classic Fragrances' which was a mini-enterprise which I was sent through the post! A chemistry teacher obviously had this idea for making perfumes. I actually had that sent to me, so that was one of the ideas I gave them before they started and that particular group latched onto that and said that was what they wanted to do." (Appendix 7b, p.140)*

One problem that faced all mini-enterprise companies, was ensuring that they met promised production dates and maintained consistent standards of quality in their goods and services. (schools I, reported above) Often the students were forced into making compromises because they lacked the time to gain the degree of skill required to ensure a commercially acceptable product.

HMI questioned how effective mini-enterprises were as vehicles for student learning about business. (HMI 1990, pp. 9-14) The student interviews conducted in this study, suggest that mini-enterprises are most effective when students have clear objectives, good time planning and effective facilitation from their teachers. Students particularly welcomed teaching that focused on what they perceived to be, 'real' problems and given the needs of future employers detailed in the IoD report (1991), learning about some of the problems challenging businesses today would seem an important part of a student's education.

### **The Impact of Mini-Enterprise on Teachers and Teaching Styles**

There is certainly evidence in this study to support the assertion made by Johnson (1988), that a large proportion of teachers are still untouched by the impact that the school/industry movement has had on teaching and learning styles because they effectively have nothing to do with it.

This may be a symptom of the reluctance of teachers to change or simply a lack of professional development opportunities. The research conducted by Eraut et al. (1991, p.31) suggested:

*"... that there are relatively few schools which have a consciously worked out whole school policy on teaching and learning."*

During the research, all the teachers interviewed were 'enthusiasts' and saw mini-enterprise as a powerful example of experiential learning. They used mini-enterprise for a number of different reasons, some to teach their students about enterprise and the harsh realities of working life, some to enable them to utilise a different teaching style, some to improve student motivation and others to enable students to work collaboratively.

Not all teachers within the schools and colleges however, were so enthusiastic about mini-enterprise, particularly some of the more political dimensions which they saw as 'shaping' student attitudes. In some schools staff saw mini-enterprise as an unacceptable form of political intervention, as a means of propagating the 'blue hue of Thatcherism'. Others saw it as a threat to their profession competence, or a challenge to their personal commitment:

*"I think people who are doing it for the first time are a bit worried, a bit anxious. One colleague found it difficult to hold back. It was difficult for him to stand back and not be involved, he's such a kind person and he was very anxious to help." (Appendix 7B, teacher 2, p.147.)*

Nevertheless, some of the teachers interviewed suggested that mini-enterprise could provide a useful introduction to more active teaching styles, one in which teachers can receive support and encouragement from their colleagues. Where they can learn, that facilitating student learning by stepping back and allowing them to take control, is on some occasions, more helpful than showing students exactly what to do. Despite the increased in numbers, mini-enterprise is still far from being an entitlement for all students. Few of the schools visited during the study, enabled all students to participate, but tended to restrict the experience for those participating in BTEC, City & Guilds, RSA, CPVE and activities which were not connected to public examinations.

Interestingly, several teachers commented on the deterioration in student behaviour when they returned to a normal lesson or timetable having concluded their mini-enterprise. During the interviews, both teachers and students mentioned the fact that mini-enterprise was clearly identified with activity in the world of work. Students were able to see the relevance of **some** of their other lessons when they had participate in mini-enterprise or work experience, activities which had clear connections with their future. Perhaps this has powerful message about the importance of a relevant curriculum to young people today!

Whether or not there are particular personality characteristics associated with enterprise, the mini-enterprise companies visited during the study appear to have facilitated a learning environment which enabled students to demonstrate a remarkable range of competencies, and these are well illustrated throughout the student interviews. One teacher indicated that he was using a similar approach when teaching 'A' level students in English and how teachers can construct similar learning environments in other subjects provides a useful topic for further studies.

### **Student Self Appraisal in Mini-Enterprise**

The student responses in both the questionnaire (Q A42) and the interviews indicated that students were generally self critical, and sensitive to any shortcomings in the standard of their work, particularly when it was to be presented to others. This must have made compromise more difficult and added to the students' sense of frustration when things went wrong in their mini-enterprise companies. Certainly the students who had participated in a mini-enterprise company became more critical as a result of their experiences when compared to the control groups.

### **The Influence of Competition to Students Work in Mini-Enterprise Companies**

In the questionnaire, over half the mini-enterprise students said that they worked better at school when they had competition. During the interviews, the students responses indicated that they clearly saw mini-enterprise as a competitive activity and compared their financial results with other companies, both within their school, as well as with the performance of students in other schools. (school B reported above)

**For the advertising you say you tendered for it. How did you come to win the contract? What did you have that the other companies didn't?** *"There was a meeting between the headmaster and the advisers and we came up with the mock design of our*



*programme and the other two companies also came up with designs and our was just chosen as the best, the most suited to the programme." (school A, p.2)*

After a period of fierce competition with fellow students, the drop in the numbers of students wishing to compete at school indicated in the questionnaire, may be understandable. The large percentage drop on this occasion in the control group, is however, somewhat unexpected. Some students did mention examinations as being a problem for them as the mini-enterprise took time from revision activities. It is therefore possible that the experience of exams or mock exams effected student perception of competition with fellow students.

The use made of advertising by the mini-enterprise companies has already been discussed and this was perhaps the most obvious way that students had of competing for the limited amount of business within school. The questionnaire attempted to establish the students' strategies for expanding markets. (Q B18) Just under half realised that they would have to find new markets once the initial response to their product or service started to decline. Students realised that the chances of cutting production costs in their mini-enterprises were limited, and that if they could not generate new markets the alternative was to sell off their stock and close down the company.

The study indicated that in most cases, the largest market for mini-enterprise companies was fellow students in their school or college, or parents and friends at home. A few companies went into the local community and tried to compete along side other companies with some success.

*"It was Christmas wasn't it (asking the group) and we were in the middle of this massive centre Christmas shoppers and everything, and we were just sitting there on a desk. We had to try and get people to come over and buy our product."(school E, pp. 2-3)(see also school A, reported above)*

Some schools provided opportunities for the mini-enterprise companies to sell their products at fairs or special enterprise markets.

*"... the PTA, who were running the fate, get some money from our stall at the fate, ..."*  
(school D, p.14)

*"Well we had a mini-market, on the last day that was when the parents came in."* (school I, p.8).

Without doubt, those students who ventured into the wider community experienced a more realistic view of business than those who remained within the confines of the school. It seems important therefore, for schools to clearly establish the aims of the mini-enterprise at the outset. Educationally, students can learn a great deal from operating within the school, extending their activities into school fairs, car boot sales and parents evenings. However, unless they attempt to take their products into the local community, they will not experience the true cut and thrust of competitive business.

## **Meetings**

Both the questionnaire and the interviews indicated that most students preferred to get on with a job than spend time talking about it. (Q A22) However, most of the students preferred to work in teams and saw this as a way of overcoming individual weaknesses. Initially the team meetings were viewed as a useful way of generating ideas for the company, but in contrast to the control group, the enterprise group were less positive about meetings when they had completed their mini-enterprise. This is possibly a reaction to the difficulties experienced by students in controlling their companies and directing the actions of fellow students, as many companies used meetings as a way of controlling the company (Schools A & I), and students would come together to discuss progress made, and problems that needed to be resolved.

*"You had the meeting at the beginning of the day to sort out what you were going to do that day and about selling during the day."* (school I, p.1)

*"We started by having a board meeting every week, didn't we? Then people would just arrive and go to what they were making ... fluffy creatures, and then we had a meeting well ... not as often did we? We just had a meeting when we had something to say."  
(school A, p.3)*

This enabled the company to plan their production and deploy their labour effectively. It also had the dual purpose of enabling teachers and AOT's to monitor progress.

### **Planning and the Generation of New Product Ideas**

All the mini-enterprise models placed a high priority on a range of planning activities within the mini-enterprise companies. Many schools required the companies to produce ideas for new products as part of the start-up process and 'brain-storming' activities were often advocated as a method of generating useful ideas. The questionnaire attempted to establish a student view of the best way of generating new ideas (Q B7). Not surprisingly the majority of students suggested that brain-storming was the best way of producing new ideas. (72.5% of the mini-enterprise group, 74.6% after the mini-enterprise) The idea of looking at competitors to gauge the competition or glean new ideas was less popular, possibly because 'copying' ideas would have been viewed with distaste by fellow students, even though it is a common commercial practice. The idea of paying for ideas was also not particularly popular. This was probably because most mini-enterprise companies did not pay their members wages of any kind and therefore paying specific individuals, either within the company, or as consultants, would not be popular with other company members.

Few students spoke about how they came up with the ideas for their products during the interviews. School G, one of the few companies which had existed for more than a year said students were always coming up with new ideas and that these were discussed from time to time. Occasionally this would result in

a heated exchange before an idea was either accepted for development or rejected as impracticable.

Student reluctance to spend time in meetings meant that some companies came to decisions about their products without spending enough time considering all the practical issues.

*"I hated it at the beginning when the bird tables were falling to pieces and we had to start all over again. You got your designs but everything seemed to go wrong." (school F, p2).*

This resulted in products which were poorly manufactured, over budget, or simple late getting to customers.

A recent study of British and Japanese companies operating in the UK found that:

*"The British companies named inadequate marketing research as the most common failure factor by a considerable margin over the other factors, despite rating its opposite relatively low status as a factor for success. Significantly fewer of the Japanese companies considered this factor of failure although they had given it distinctly more emphasis than the British as a success factor, albeit at a relatively low level." (Edgett, Shipley and Forbes, pp. 8-9, 1992)*

In other words, British companies perceived market research as relatively unimportant, even though it may well have been the cause of product failure.

The Japanese saw market research as more important and suffered fewer product failures. Despite students apparent reluctance to engage in planning activities observed in the current study, the work of Edgett et al. (1992) provides the imperative for mini-enterprise companies to focus far more attention on this aspect of their operation, to highlight what appears to be a weakness of British business.

Some of the most successful examples of market research activities observed during this study, took place in schools or colleges that had integrated a mini-

enterprise into a business studies course, or related the activities to work experience. In these mini-enterprise companies, the students had a far clearer idea of the need for a comprehensive business plan and tended to have a more diverse range of products or services to offer.

However good the planning was, the problem of the students lacking the technical skill(s) and knowledge to produce more complex products remained. Although in one case, this problem was overcome by the use of a 'ready-made' enterprise activity. This idea, which was a range of cosmetic products, was presented with a semi-developed technology. There were still a number of substantial challenges left for students to face, the availability of certain chemicals, aspects of health and safety, and environmental issues for example. The attraction was, that students were able to obtain access to an idea which had been researched, but still had plenty of opportunities for their knowledge from other subjects to be incorporated, which enabled students to concentrate on the business and marketing aspects of their company. An added bonus was that the products had a wide general appeal, and therefore enabled students to sell to customers beyond the confines of the school.

### **Summary of Findings Related to the Focal Points of the Research**

In this chapter some of the findings from the questionnaire and the interviews conducted with students and teachers have been highlighted in the context of the expectations of the various mini-enterprise models used. In the concluding chapter, these findings will be discussed in the context of enterprise education in schools and possible future developments.

## **CHAPTER 7**

### **CONCLUSION**

#### **SUMMARY OF THE FINDING OF THE RESEARCH**

This research project set out to investigate a number of features ascribed to student involvement in mini-enterprise companies, (p. 100) and the last two last chapters detailed the findings of the investigation. One of the important features of mini-enterprise, is that it purports to simulate the activities of businesses in the commercial environment. However, the findings of this research suggests that mini-enterprise companies lack realism in a number of important areas, which detract from the learning potential of the experience. The data makes it clear that many students found difficulty with the complexities of running a successful mini-enterprise, despite the support given by AOTs and 'company kits', and few understood the importance of some of the basic, but vital issues even when they had completed their mini-enterprise experience.

#### **STUDENT UNDERSTANDING OF THE COMPLEXITIES OF RUNNING A BUSINESS**

This study was only involved with students attending middle, secondary schools, and sixth form colleges. Although students were often given work to prepare them for organising and running their mini-enterprise, no clear parameters were set for their company's operation. It was therefore perhaps not surprising that despite the rhetoric contained in mini-enterprise models, student responses, in both the questionnaire and interviews, showed little understanding of key financial areas such as; what constituted profit, the cost of overheads, the potential implication of taxation liabilities, and their true manufacture and production costs. During the running of their mini-enterprises, students' pricing structures were guided more by what they thought people might

pay for a product, than the true costs involved with providing the particular product or service. Success was often viewed in strictly financial terms, and often meant no more than not making a loss. In fact, in most cases if only notional costs were included for overheads, wages, research and development costs etc., then few, if any of the mini-enterprise companies visited during the study, could claim not to have made a loss! Comparison of student responses in the questionnaire and the semi-structured interviews that followed, showed that the students did not always use the knowledge they had acquired during the operation of their mini-enterprise.

Students certainly did learn by the experience gained during the mini-enterprise, but a clear statement of the objectives of the simulation, together with guidance about aspects of the company organisation which could be considered, or left unresolved during the simulation, would have enabled students to realise the complexity of the task they were undertaking, and have provided them with a clear measure of what they had achieved. One must question whether 'discovery learning', as it often seemed to be, is a cost effective approach to what is rapidly becoming, a minor part of the National Curriculum. (Jamieson 1991)

The methods used for raising capital by the small scale mini-enterprise companies were often inappropriate and unrealistic. The methods used to raise a mini-enterprise company's initial finance had little to do with the scale or nature of the mini-enterprise and was usually prescribed by either the teachers (or AOTs), or the support literature used. This led in some cases to very inflexible and unrealistic methods being adopted to obtain both start-up and working capital.

Students omitted to include all relevant costs when pricing their products and services. No mini-enterprise company visited during the study paid their work

force on a regular basis and many students certainly did not understand the old adage, 'Time is Money'. They failed to appreciate the importance of, undertaking research activities prior to starting production, establishing accurate costings for all aspects of production, and the importance of careful marketing to the success of their products and services. In most cases, these important planning stages were viewed as an unnecessary distraction from the real business of making and selling.

### **THE DEVELOPMENT OF KNOWLEDGE, SKILLS AND ATTITUDES DURING MINI-ENTERPRISE**

Mini-enterprise activities are potentially a fertile environment for students to gain new knowledge and develop a variety of new skills and attitudes. Additionally, they provided an excellent opportunity for students to utilise their existing knowledge and skills in a practical context. One of the more positive aspects to emerge from the study was the manner in which students came together to work as a team, united by a single objective, that of making their company a success. Guided by their teachers, AOTs and some of the literature from mini-enterprise company models, they elected 'officials', such as managing director, personnel manager, and quality control manager, with responsibilities for different aspects of the company's work. This practise was at best an unnecessary distraction from the work of the company, and on some occasions it caused resentment and conflict between individual students and between students and their advisers. Most companies saw the need for some kind of leader to co-ordinate their company's activities, but when left to work out a structure for themselves, naturally seemed to favour the 'flatter management structure' common in newer companies in Japan and Germany. (Wellington 1993)



Often, the mini-enterprise group were friends and this led to severe trials of will at times. The group dynamics were more impressive when the group came together for the first time as their mini-enterprise company. Examples of the censure of company members, of hidden talent(s) blossoming for the first time, and great personal sensitivity, were all revealed during the semi-structured interviews. Students discovered for themselves by first hand experience, that the power of the group was greater than the sum of its individual members. The confidence they gained from working together in situations that most adults would find stressful, was remarkable. Unfortunately, few used their skills in the wider community to market their goods and services, tending instead to work within the benign confines of their school or college

The quality of products made by mini-enterprise companies was generally poor, using low level skills, and the work of mini-enterprise companies was generally unrelated to other aspects of the curriculum. The products produced by mini-enterprise companies were predominantly of low value and required limited technical skill to manufacture. Given some of the operating parameters, this was not altogether unexpected. What was surprising and perhaps more alarming, was the poor quality of finished products and the lack of attention given by students to customer service. Clearly some allowances have to be made for the age, maturity and physical capabilities of the mini-enterprise company members. However, even after such allowances, had been made, the standard of products offered for sale by mini-enterprise companies were often unacceptable and would not be marketable in a commercial environment. Students were conscious of the poor quality of their products and this was undoubtedly the reason why many companies opted to offer a service requiring limited skill, or to operate as a retailer for commercial products.

Students working in mini-enterprise companies were generally well motivated and remained on task. They enjoyed working in mini-enterprise companies

because they were given the opportunity to organise their own work. The opportunity to make money seemed to provide a clear rationale for the work of the mini-enterprise companies and provided a focus for students' work. Personal gain was important to some but not all students, and 'profit' seemed to provide a clear performance indicator for all concerned. Most students indicated in both the questionnaire and during the semi-structured interviews that the opportunity to organise their own work and work out problems for themselves was for them, the most important aspect of mini-enterprise.

## **THE SIGNIFICANCE OF THE FINDINGS OF THE PROJECT**

### **What will be the Shape of the World of Work in the Future?**

The poor performance of the UK economy compared with that of its competitors was discussed in an earlier chapter. Successive governments have attempted to respond by introducing various measures including educational and vocational initiatives. However, the process has been complicated by a number of factors outside the government's control. The influence of multinational corporations organising their activities on a transnational basis, has limited government's ability to exercise much control over the economy. There has also been a redistribution of jobs in the manufacturing and services industries between societies. These have included not only jobs associated with low skilled labour and intensive production, but more recently, work in the high technology, high valued added (hi-tech/high value added) sectors as well. (Ashton 1992)

Some countries, such as Singapore and Korea, have attempted to attract multinational companies to operate within their boundaries using them as a means of developing the production of high value added products. Other manufacturing countries, such as Germany and Japan, have also encouraged employers to enter this sector of the market. The UK government, although

publicly committed to a high value added economy (Shephard 1993), has opted to let market forces determine the markets companies should operate in, which has tended to be towards the low value added end of the market.

This rather confused approach has implications for the recruitment policies of companies operating within the UK. If they are committed to the hi-tech/high value added sector of the economy, then their requirements will be for;

*"...employees who have the conceptual ability to understand their role within the organisation and a commitment to the values of the organisation." (Ashton, p.10 1992)*

Some companies have opted to use new technologies to 'de-skill' jobs and in so doing, increase productivity. Such an approach requires a lower input of skill from the labour force with commensurate reductions in their salaries.

These companies and those operating in the low value added sectors may well require;

*"... workers who are obedient and disciplined and who would stand by their machine or desk and do as they were told with no questions asked." (Ashton, p.10 1992)*

The nature of the economy clearly has implications for education in general, and aspects of the work related curriculum, including mini-enterprise, in particular. Criticisms about the ability of education to prepare young people for the world of work were detailed in an earlier chapter, but two important questions still remain for further consideration.

Given the speed of technological advances in industry could education ever accurately anticipate the needs of the country's industries a decade in advance and organise an appropriate curriculum to meet them?

Secondly, would it want to? Should compulsory education be geared to the needs of the national economy, rather than the needs of the individual student, or should try to reflect the needs of both?

Answering the first question is fraught with difficulty, due in no small part to the differential progress being made in different sectors of industry. (see Jamiesons 1993, p.203/4) Already there are indications that the need for highly skilled employees in the hi-tech/high value added sector has in turn created the need for high level training over extended periods, something which is probably beyond the capabilities of schools or colleges at present..

*"No matter how well trained (students) are at schools or in colleges to operate effectively in these organisations, new forms of knowledge and skills are needed which can only be acquired on the job. In these circumstances the enterprise acquires a far more significant role in the process of skill formation than it has had hitherto. This means that industrial societies that pursue a high value added route may no longer be able to transmit work-based skills through the formal educational system." (Ashton p. 18, 1992)*

If this is the case, it has serious implications for the future of mini-enterprise. The present study observed students participating in the production work which required little skill and drew little from the students' 'core' curriculum. The mini-enterprise companies were claiming that they introduced students to realistic forms of industrial organisations, yet they were predominately based on historical models which bore a marked resemblance to the low tech./low value added company described above. If that is to be the future of the UK economy then these models might be appropriate. However, if the aim is to participate in the high value added sector, a new and more appropriate model for mini-enterprise needs to be constructed which more accurately reflects future needs.

Given the difficulty of constructing a work related curriculum which addresses the needs of the economy of the future, perhaps compulsory education should concern itself exclusively with fundamentals of a general, or liberal education as advocated by Holt in a previous chapter, rather than attempting to fulfil the rather nebulous requirements of industry?

*"The difficult task is .... to ensure that curriculum change is not passively and predominately determined by employers' immediate skill demands, but remains the subject of*

*its own objectives: the development of individual student's knowledge and skills on a sufficient and continuing scale to ensure their deployment at a higher level than that which would have been generated by employers' short term skill demands alone" (Richardson, p.247 1993)*

Given the pressures schools face implementing the National Curriculum and other government initiatives, providing a basic curriculum may well be an attractive option for some schools. It could however lead to the loss of many links established by various government initiatives, (Shephard 1993) that have contributed to various phases of education during the past decade. For example, work experience, mini-enterprise and the work of TEC and education/business partnerships.

### **Mini-Enterprise and the Small Business**

Most of the mini-enterprises visited during this study were based on a large company model. This is hardly surprising when much of the material available to support mini-enterprise (Young Enterprise Company Kit 1987, The MESP materials 1987 and the MiniCo Kit , Bray 1983) extol the virtues of such a model, in preference to co-operative, a partnership, or a sole trader or self employed models.

If one of the objectives of the mini-enterprise is to enable students to learn about the operation of the large companies as a prelude to recruitment, the use of such a model will undoubtedly be useful. If however the purpose is to encourage an interest in, and growth of, small companies and (or) self employment, a wider range of alternative models needs to become more commonplace. Less than 5% of mini-enterprise companies visited during this research used, or considered basing the operation of their mini-enterprise on a small company model.

## **The Development of Small Companies and the Self Employment Sector**

During the past few years, when youth unemployment, has been high, the Enterprise Allowance Scheme (EAS) has been presented as an alternative for young people. Yet the success rate of such enterprises has not been encouraging. Only 73% still remain trading after eighteen months and only 65% after three years. (RBL Research International 1987; DE 1988, cited in MacDonald & Coffield 1991, p.157)

The small business sector is viewed as an important part of the economy, not least because it employs a large part of the workforce. Small companies are often involved in low skilled production work, or traditional craft occupations, such as plumbing and domestic electrical work. Conversely, many of the hi-tech/high value added industries, such as those found in the computer hard and software industries, have often started small, but had a period of rapid expansion to become a major company in their business sector. (e.g. Apple & Microsoft) It is clear that small businesses will continue to represent a significant part of the economy and consequently, if young people are to start a business they are clearly going to start small and grow. It would therefore be more realistic for mini-enterprise companies to use a small business model in future, rather than continuing to using a large company model.

During the study, few companies actually failed to make a profit in **their terms**, and most students left the experience believing that they were able to succeed in business, although in reality, few had run their mini-enterprise business in a realistic manner. They appeared to make money, but did they make a profit? If self employment, or establishing a small business is to continue to be presented as a realistic opportunity for school leavers, then those running mini-enterprise companies in secondary schools need to ensure that students pay realistic overheads to reinforce the realities of the '**real**' world of business.

## **The Skills and Knowledge Require by the Businesses of the Future**

The pace of change and the creation of new industries make the identification of specific skills and knowledge required by new recruits into industry, difficult if not impossible to specify. Clearly all students need certain basic communication and arithmetical skills, but there has been an argument supporting the need for education to encourage the development of, transferable generic skills, certain social and life skills necessary for the world of work, and for the development of 'learning cultures' in organisations.

*"The emphasis in 'enterprise' has certainly been towards the individual and away from the so called culture of dependency with rhetoric focusing on preparation for the age of flexibility, small business and entrepreneurship." (Wellington, p34 1993)*

The word 'enterprise' holds different meaning for different groups, as was discussed in an earlier chapter, but those businesses involved in the high value added sector of the market need recruits who are enterprising, who are creative, who initiate, who have drive and determination, who are prepared to take calculated risks, who can lead and are flexible enough to work as a team member and perhaps most important of all, who are self motivated and willing to work hard to achieve company objectives. (see Wellington 1993, & Watts 1993) Conversely, those companies using a traditional hierarchical structure of management and control, may well find such recruits too outspoken and dysfunctional to their company.

How will the potential recruits acquire these skills? Traditionally perhaps from experiences gained whilst studying the broad range of curriculum subjects taught in most secondary schools. In recent years this would have been replaced by the entitlement contained within the National Curriculum. Additionally, during the past decade and a half, this has been supplemented by aspects of the work related curriculum, such as work experience and mini-enterprise which have been fully described in a previous chapter.

At first glance, it is difficult to see how the broad approach of the National Curriculum could deliver the outcomes required. There is however in this country, a widely held implicit belief, that certain subjects, such as history and R.E. which have little obvious relevance to vocational activities, have value by virtue of enabling transferable skills to be acquired during extended periods of study. (see Bailey's criticism of this point p. 103, 1992) This position contrasts with that of educational systems in many other countries, such as Germany and Japan, who are our industrial competitors, and whose economic performance has tended to outstrip that of the UK.

Clearly there is a need for a broad and balanced curriculum, but this has to be relevant to the needs of the society of today, more particularly, that of society some ten years hence. The present study indicated that students appeared to develop many of the skills required in the hi-tech/high value sectors, even though the support materials presented the more traditional company models. What mini-enterprise companies generally failed to do however, was to provide challenges which more closely reflected the problems faced by the hi-tech/high value added sectors, and incorporate relevant learning experiences gained by students from their National Curriculum studies.

Interestingly, some educationalists have identified interesting parallels between aspects of the work related curriculum and liberal education. (Bridges 1992) If one accepts that a working definition of liberal education might set out to equip people to make free, autonomous choices about the life they will lead, (Bailey 1992), then a programme of study which provided opportunities for students to acquire the kind of skills required by the hi-tech/high value added industries as listed above, would not seem to be incompatible with such aims. One difference clearly lies in the beneficiary of any teaching programme. On one occasion it could benefit an individual, on another, company objectives might take precedence. Clearly there could be occasions when de-



cisions taken benefit all concerned, but equally, there could be conflict, particularly when things went wrong. Would enterprise education help then?

It is likely that a company employing enterprising people, will have a clear 'mission statement' defining its policy towards its customers, employees and the society in which they live. It might itself be enterprising, capable of:

*"... creating and responding to new demands (albeit within the principled framework set by their own aims or 'mission'), and sustaining and supporting the energy and initiative of all their staff." (Bridges, p.93 1992)*

Progressive experience gained through actually working in 'enterprising environments' clearly minimises the risk of mistakes and helps to develop sensitivity, and a responsible and caring attitude towards personal and corporate actions. The present study provides some powerful examples of students' development of such attitudes towards their work and their mini-enterprise company, which certainly seems to support the claims of those who advocate active and experiential learning. (eg. Rogers 1983, 1965) However some educationalists advocate a more balanced presentation of enterprise education, and would prefer the emphasis to be skewed towards the development of student autonomy, so that in addition to consideration of the work of the market economy, students would also consider: :

*"... alternative systems and alternative motivations to those of profit and selling ..... Also to be understood, as apparently inescapable aspects of the market economy, would be those frictional elements like unemployment, recessions, failure and bankruptcies of enterprises, the consequences of encouragement to borrow, gross inequalities of wealth and so on. These are all undeniably parts of the free market picture; to ignore them is grossly indoctrinatory. I remain to be convinced that enterprise education gives any attention to this negative side of free enterprise." (Bailey, p.102 1992)*

This study has certainly highlighted the need for a broader presentation of the work of industry, for practical as well as ethical reasons. For only a small number of mini-enterprise companies encountered some the negative aspects of commercial life during their operation, others, protected by the limited opera-

ting environment, somewhat naively believed, that selling goods and services was straightforward and easy. They were protected from rejection and failure which is so often a feature of the sales person in commercial life.

### **The Implications of Mini-enterprise to the Youth Labour Market**

In 1988 when this research began, the effect of the 'demographic time bomb' was one of the major concerns, relating to school leavers and the world of work. (Jackson 1988; Watts 1991, p.141) Students leaving school were in demand and employers were expressing concern about the shortage of potential recruits. Now, some four years later, youth unemployment is a major concern and employers are more critical about the 'quality' of students leaving full time education.

Certainly during the past decade, the youth labour market in this country has changed considerably, largely because of the increased provision of youth training programmes organised by government departments and an increase in the number of students electing to remain at school or college beyond the compulsory age of schooling to gain further qualifications, or perhaps to avoid unemployment.

In recent times, the operations of large multinational companies (MNCs) have influenced the economy of individual countries, and led to the redistribution of jobs in both the manufacturing and service industries. Many MNCs have moved jobs in labour intensive industries to the low wage economies of the developing countries to improve their profitability. This process has extended to include hi-tech/high value added industries, best illustrated by the move of certain aerospace activities from the UK to Taiwan. This relocation process has led to a decline in manufacturing employment, particularly in unskilled manual work and jobs using some of the traditional craft skills.

Conversely, there has been an increase in, non-manual jobs, jobs associated with modified craft skills and production industries. Additionally a number of 'white collar' and professional jobs, associated with the new 'knowledge-based industries' have also been created. (Ashton 1992) Just how serious an impact these shifts in employment patterns are to individual countries, depends on how successful governments are at attracting MNCs. For this reason Japan and Germany have witnessed less of a decline in manual employment than the UK.

Intense world wide competition has forced companies to make changes in their organisational structures. Aggressive competition by Japanese companies, has encouraged competing companies in other countries, to study the new forms of organisation and production arrangements being used by the Japanese. For the Japanese methods have proved to be more efficient in raising their levels of productivity, than the more bureaucratic control traditionally used by Western organisations. Competition has also intensified between transnational and regional trading blocks, which has also increased the pressure for companies to improve their competitiveness, reduce their production costs and react rapidly to market pressure. (Ashton 1992) This has led to the changes in management structures outlined above which emphasise teamwork and flexibility amongst the workforce.

The implications of these international pressures directly effect the entry of young people into the labour market. Those who have the required skills will be inculcated into MNCs by professional, or specialised forms of skills training. The less fortunate young people, due to their lack of education and skill, or perhaps their location, will be forced into a less stable employment market. Companies opting to use advanced technology to deskill jobs in pursuit of short-term profitability, will in all probability recruit young people from this sector of the labour market. Such employers will tend to invest little in workforce

training, or provide any long term employment prospects, preferring instead to invest in the technology required to replace manual production input.

*"There is an extremely clear trend towards more jobs requiring developed intelligence and skill. Unskilled jobs on the other hand, are melting in the sun. They are being 'designed out', while machines take over the repetitive mechanical work." (Cassels, 1989 p.11; see also U.S. Department of Labor, 1991 & 1992)*

Education can however be an important influence on the MNCs policy, in that the availability of a well educated youth labour pool can make the creation of high value added industries more feasible. Conversely, a lack of such skilled potential recruits may make the creation of such industries difficult if not impossible. In the past, the UK government has been somewhat diffident about playing a direct role in the creation of its preferred hi-tech/high value added economy. For whereas other governments, such as that in Singapore, view education and training as a major means of supporting such a strategy, the UK government has left the process largely in the hands of market forces.

In Education for the 21st Century (1991), the government set out its strategy to ensure that education became more sensitive to the educational and training needs of businesses in this country in the future. The White Paper highlights the need for a closer relationship between education and business through local Compacts, TECs and Educational Business Partnerships. It recognises the need to make education more relevant to students, to improve student motivation and to attain higher standards, suggesting that its policies will create:

- more opportunities for young people to start preparing for entry into work while at school and college
- a modern system of academic and vocational qualifications, both of high standard and both highly valued, which offer ladders of opportunity right through from school to work and throughout working life

- a real partnership between education and business, so that both can work together to create a learning environment at the transition from school to work, and to make what is taught in school more relevant to the world of work. (DES 1991, p.64)

The document is a direct response to the demands which have been articulated over the past few years by organisations such as CBI, RSA, and IoD. It appears to recognise that most young people will continue to find employment with large companies and that employment possibilities created by a plethora of newly created small businesses, is, for the present at least, somewhat remote.

Individual employers are also conscious of the need to influence the educational process and for them to smooth the process of transition by integrating students' learning at school and college, with that which takes place in the workplace and an earlier chapter indicated some aspects of their work. The view of many prominent industrialists is that the UK is locked in a commercial battle with other nations, and that unless we can produce an 'Enterprise Culture' that understands this, and accepts the need for everyone to work for commercial success, the UK will be doomed to second division status in the commercial world. The stake for business, particularly the small business, have been detailed above, but there are implications for individuals as well.

*"Less educated people are less able to profit from the enterprise culture. Because they cannot profit from the enterprise, they are thrown into the dependency culture ... our task is to deliver the goods - create the wealth - and win more hearts and minds for capitalism and enterprise." (Morgan 1990)*

The rhetoric may be extreme, but case for developing a more highly educated and well trained workforce is becoming more generally accepted by educationists, businesses and government officials. (Shephard 1993)

The educational system in the UK has been typically a fairly rigid academic curriculum for an elite, combined with a form of apprenticeship provision for early

school leavers. The lack of a provision for intermediate skills coupled with an inflexible attendance requirement, has been blamed for the mass youth unemployment which led to the need for the establishment of government schemes for work based training.

If the UK is to establish a high value added economy then the government needs to; be more proactive in generating high standards of student achievement; provide flexible education and training opportunities for school leavers, and persuade business to commit itself to high value added production in the UK.

*"For unless employers are also persuaded to opt for the production of high value added goods and services there will be insufficient demand for such skills. In this scenario a large proportion of young people will be destined to enter external labour markets and the unskilled and semi-skilled jobs associated with production of low value added goods and services." (Ashton p. 22, 1992)*

Given this grim scenario, what role can mini-enterprise play in preparing young people for their entry into the youth labour market? The present study suggests that in its present format it sends mixed messages. The last chapter indicated that the level of skill demonstrated by students during the production of goods and services was abysmally low, and the quality of products produced was poor. The company models presented simply reinforced the traditional bureaucratic structures typical of low tech./low value added companies. In the questionnaire, student knowledge of certain aspect of economics was encouraging, in both the control, as well as the mini-enterprise groups. Unfortunately, the follow up interviews indicated that few students were able to use this knowledge in the practical context provided by mini-enterprise.

This research project seems to indicate that if mini-enterprise is to continue, particularly in the secondary phase of education, new models are needed to ensure the experience is relevant and prepares students for the world of the hi-

tech/high value added MNCs, or the realities of business as a small company or self employed person. Additionally, links need to be made with work in other curriculum areas. The benefits of such links were demonstrated during the research by the mini-enterprise which had been integrated into a business studies course. Opportunities for similar profitable and relevant links already exist in the science, technology, English and mathematics National Curriculum programmes of study, and these could undoubtedly be extended by the enthusiastic teacher.

The research indicated that lack of time for students to participate in their mini-enterprise detracted from the realism of the experience. It is difficult to see how this problem can be overcome at secondary school level given the overcrowding of the curriculum, particularly at Key Stage 4, and the numerous initiatives being introduced by the government. Given the continual pressure on the curriculum, all activities must be cost effective. Whilst many very positive aspects emerge from the mini-enterprise experience, there must be some doubt whether the activity in its present format is the most efficient, or effective use of school time in the secondary phase of education. It may well be that mini-enterprise companies, in the secondary phase at least, are a luxury schools can no longer afford. Or it may be that if the experience is considered to be of value, it will be pushed back into the cluster of extra-curricular activities from whence it came.

### **Mini-enterprise in the Enterprising School**

Most secondary schools now, thanks to the Local Management of Schools (LMS), are mini-business in their own right. They are responsible for their own organisation including the hiring of both teaching and non teaching staff. This provides an opportunity for them to provide work opportunities for students to participate, helping to fulfil a number of functions within the organisation.

Some schools have used students to a variety of work tasks; as part time receptionists, to run the school mini-bank, to staff the school bookshop, as librarians, to perform tasks on the school farm, as members of the Combined Cadet Force, or as part of their studies in a work practice unit owned by the school. (Jamieson et al. 1988) In such cases, students received no payment for their work. However, in recent years some sixth form students have been recruited as cleaners and work as part of the school's cleaning team and they are paid at the same rate as other cleaners. In such cases the work performed by the students is rarely related to students future role in the world of work and many opportunities to draw out work-related are missed.

In the LMS culture, many schools are becoming more enterprising organisations, gaining sponsorship, for room decoration from local firms, and from national firms for equipment such as filofaxes, which are used by students as school contact books. The potential for school task related mini-enterprises seems the obvious development of this process, one which not only provides business opportunities and problems for students to tackle, but also provides activities which bond the work tasks to student education and welfare in a very direct way. As more schools, particularly those which operate post 16 courses, become involved in NVQ, so the possibilities of student run mini-enterprises which are part of the school structure, become more apparent. School cleaning, catering, resource and support functions, secretarial work, school based crèche, school maintenance and IT servicing, all have mini-enterprise privatisation possibilities. At present, particularly in large schools, there are legal problems associated with tendering which would need to be addressed, but not dissimilar problems associated with work experience placements were overcome some years ago.

Although such activities provide opportunities for students to become involved in a mini-enterprise providing a 'real' service, there are innumerable problems



associated with the development of such activities on a national scale. The most obvious is that it denies the present post holders their job. Then there are questions relating to the purpose of school, the objectives of the new mini-enterprise and the dual responsibilities of teachers as educators and employers. Perhaps the most serious problem is that most of the tasks capable of being performed by students require little skill and do little to prepare students for the desired hi-tech/high value added economy of the future.

### **Mini-enterprises as Consultancies**

Opportunities for activities in this area of work are more likely to be created by partnerships established with local companies working in the field. Many companies have already been able to support the work of student projects in technology by providing commissions for groups of students, to work on projects which relate directly to the work of staff in the company. At a time when much of the work of commercial and educational concerns is conducted by a bidding process, it seems entirely appropriate that mini-enterprise companies should organise their work on a consultancy basis in a similar way. This provides 'up-front' educational and business opportunities requiring management and financial skills of the highest order. 'Real money' only becomes an issue when the mini-enterprise wins a contract. The approach also provides opportunities for students to experience the world of the high value added companies. This approach also has the added advantage of being directly related to students' work in the National Curriculum, it is an integral part, **not** an additional activity to be 'bolted on' somehow.

### **Learning Styles Within Mini-enterprise**

Many educationalists feel that the opportunities for experiential learning used predominantly in mini-enterprise, are as important as any knowledge gained from the experience. (Jamieson et. al 1988; Reid 1989 p.18) The data pro-

vided in this study indicates that students are frequently given a measure of autonomy to enable them to maximise the opportunities provided by this form of learning. Students seemed to respond well and enjoyed the degree of autonomy experienced during mini-enterprise and their teachers were often surprised by perceived changes in student attitudes towards their work. A similar change of attitude was reported by Eraut et al. in their recent study on flexible learning:

*"Learners can be said to have taken ownership of an idea when they are able to use it for their own purposes rather than other peoples' purposes ... The idea does not become part of their repertoire until they can use it as a resource for thinking, whenever it might be relevant... To put it more broadly, learners develop a sense of ownership of an area of subject matter when they begin to have some mastery of the issues rather than only a superficial acquaintance and a capacity to regurgitate it on request. Such ownership brings about significant gains in confidence which in turn becomes an important motivator for the continuing process of learning." ( Eraut et al. 1991, p.25)*

Most teachers were conscious of the positive aspects of student development during their mini-enterprise. Their dilemma was that they were not able to shape or direct student learning during the process. They simply did not know what each student had learned, and when new learning had taken place. Many were also conscious that the mini-enterprise took a considerable amount of time and with the current trend towards accountability, the mini-enterprise was an activity which was difficult to evaluate and over which they had little control. This may well account for the behaviour of the teacher reported in school A. Teachers were anxious for their students to demonstrate the outward signs of success.

The inclusion of details of a student's mini-enterprise, together with a detailed action plan in the student's Record of Achievement is one way of ensuring that the skills and knowledge gained by the experience are not lost. The development of a national ROA is unique to this country (Berkeley 1992) and provides a valuable bridge for students to present experience and competencies

gained during their mini-enterprise, to potential employers. Some of the more enlightened employers are aware that if the UK is to educate a generation of 'independant learners', the process has to start in school at an early stage.

*"The underlying thesis has been that if the workforce of the future is to be different to that of the past, it is no use waiting until young people emerge from the education system in the hope that they will have developed initial work related competences and be committed to lifelong learning. In other words, employers cannot sit on the sidelines and complain about education; they must bring leadership, support and, in ome cases, resources to bear to improve the system for reasons of enlightened self interest." (Berkeley, 1992b)*

The potential for mini-enterprise has been outlined above, it can provide a valuable extension to the student's education and is a rich source of information for employers. One in which many companies have been, and can continue to be, directly involved, shaping the model to reflect to realities of business life.

The questionnaires completed by students illustrated that students knew a great deal about business and economic life, the interviews with students however demonstrated that they were not always able to utilise that information in practical situations. They had accommodated but not assimilated the information, they had seen and heard, but not truly understood. The strength of mini-enterprise is that it provides the context for students to unlock their experiences, from school and beyond, and apply them, with help from their fellow students, in practical situations. Students have to identify needs, and seek solutions to problems. If they lack expertise, the challenge is to find solutions from others, and this acts as a powerful source of motivation. The students were very task oriented and demonstrated a tremendous capacity for work in this context. However, many of the skills and attributes demonstrated during the mini-enterprise were not transferred back to other lessons. Some students (and their teachers) commented on difficulties getting back to the normal school timetable after participating in mini-enterprise and students saw little relationship between the activities undertaken in mini-enterprise and the work in-

volved in other subjects with perhaps the exception of technology and a few other practical areas.

Mini-enterprise can be extremely helpful in facilitating opportunities for students to develop a range of practical and social skills essential for them when they enter the world of work. However, the experience is of questionable value if these skills do not transfer to other aspects of student learning in school. Furthermore, if they do not transfer to other school activities, how realistic is it for them to transfer to the activities students undertake outside of school?

Although mini-enterprise is a powerful vehicle for development of a wide range of personal and social skills useful to modern businesses, and is still viewed as one of the most direct links between education, business and the community at large (NCC 1990, p.6), this study poses a number of questions about its value for secondary school students during the coming decade. If it is to continue to make a contribution to the educational process as advocated in National Curriculum Guidance 4, modifications are urgently needed to:

- accurately describe the objectives of the particular mini-enterprise which will vary, both from school to school, and between the different phases of education
- promote mini-enterprise from within National Curriculum subjects, rather than allowing it to develop as a 'bolt on', or additional activity
- actively engage the assistance of local business to participate, not only as advisers, but as potential contractors of students' work
- to involve local businesses as 'referees' or examiners - able to make contributions to students' ROAs, and assist in the production of student action plans
- ensure that mini-enterprise companies establish and declare realistic operating costs which enable students, and others to compare their operation with that of commercial companies.

Energetic and enthusiastic teachers will always strive to ensure that their students participate fully in mini-enterprise projects and this has undoubtedly contributed to their success in the past decade. Despite the increasing numbers of mini-enterprise companies however, the experience is still not an entitlement for all students and the quality of the experience varies considerably from school to school. The increased pressure on teachers created by the National Curriculum and other recent government initiatives, the expansion of work experience, and concerns about the politically oriented nature of commercial mini-enterprises threaten its future in schools.

This research contains numerous examples of 'enterprising students' but it also questions the suitability and effectiveness of the enterprise models used as a preparation for students entering the world of work. Further research needs to be undertaken to establish the cost effectiveness of experiential learning for student of secondary age, involved in mini-enterprise activities. However, it would be wrong to underestimate the value of mini-enterprise in the development of a variety of inter-personal skills which are particularly relevant to hi-tech/high value added businesses. This research indicates, that when given suitable opportunities, students can manage their own learning, capitalise on aspects of active learning and evaluate their performance.

The question remains, is mini-enterprise the best, or only context for such opportunities to be developed, or are there more cost effective ways for students to develop these skills? This study indicates that students were often motivated by mini-enterprise because they saw it as being relevant to their understanding of the world of work.

A recent OECD report states:

*"The greatest challenge that arises .... is to find ways of recasting basic schooling, to improve its ability to prepare young minds for a modern workforce. Secondary schooling in particular does not appear to be producing well motivated and well rounded young people that employers would like to recruit - on the contrary, its effect sometimes seems to be to demotivate them and narrow their perspectives" (OECD 1992, p.25)*

Before starting this research, I observed numerous occasions when the opportunity to work in a mini-enterprise company motivated students, some of whom were totally demotivated by all other aspects of their life at school. Unfortunately, to maintain this type of success mini-enterprise needs to be dynamic, constantly changing and improving its operation to mirror the developments in the business world. Such development has not been easy, not least because of the lack of consensus and clear objectives for such activities in schools. However, radical modifications are needed if mini-enterprise is to win the right to continue to be part of the secondary school curriculum. Hopefully this research has provided some useful indicators for future modifications and improvements that will enable mini-enterprise to continue to excite another generation of students with the opportunity of running their own business.

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# **STUDENT LEARNING IN MINI-ENTERPRISES**

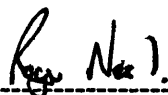
## **Appendices**

Submitted by Roger Nash  
for the degree of Ph.D  
of the University of Bath  
1992

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## **APPENDIX 1**

### **The Knowledge Skill and Attitudes Documented in Enterprise Activities in SCIP News Numbers 12-22**

SCIP News (Numbers 1-5 were entitled SCIP Views) has been reporting the range of school/industry activities organised in school for since 1978. Numbers 12 - 22 were consulted and the features of the mini-enterprise activities reported itemised. Each activity was then identified as an influence on students' knowledge, skill or attitudes, or combinations of the three. It should be noted that the style and content of SCIP News changed during the period covered. The later editions containing more articles about the influence of the National Curriculum on School/Industry work and less about specific examples of the work in school. The information collected was utilised during the construction of the questionnaire used in this study.

## **SCIP NEWS 12**

### **P. 12 The Enterprise Project**

Work cooperatively	<b>Attitude</b>
design activities	<b>Skill</b>
marketing	<b>Skill</b>
testing	<b>Skills</b>
finance	<b>Knowledge</b>
production	<b>Skill</b>
evaluation	<b>Skill</b>

### **P. 17 Aquid - an 'A' level mini-enterprise**

knowledge of finance	<b>Knowledge</b>
marketing	<b>Skill</b>
production	<b>Skill</b>
human relations	<b>Attitude</b>
economic considerations	<b>Knowledge/Skill</b>
financial accounts	<b>Knowledge</b>

### **p. 18 Simulations**

Wage/contracts	<b>Knowledge</b>
negotiations	<b>Skills</b>
training	<b>Skills</b>
community relations	<b>Attitudes</b>
travel	<b>Attitudes</b>
press and publicity activities	<b>Knowledge/Skills</b>
costing plans	<b>Skill</b>

## **SCIP NEWS 13**

p. 20 Milk Industry, World of Work Simulation for Primary School Children.

Discussion & Listening	Skill
------------------------	-------

Information Gathering	Skill
-----------------------	-------

Analysing data	Skill
----------------	-------

Presentation skills	Skill
---------------------	-------

p. 22 Dance Evening Enterprise

Planning	Skill
----------	-------

Communication skills	Skill
----------------------	-------

Cooperation	Attitudes
-------------	-----------

p. 25 The Passmore Catering Catering Company

Accountancy	Knowledge/Skill
-------------	-----------------

## **SCIP NEWS 14**

p.4 The Practice of Publishing

Publicity	Skill
-----------	-------

Presentation	Skill
--------------	-------

Marketing	Skill
-----------	-------

p.13 Infant Industry a Production Simulation

Use of money	Knowledge/skill
--------------	-----------------

Production Methods	Knowledge
--------------------	-----------

Manufacturing	Skill
---------------	-------

Sales	Skill
-------	-------

Distribution	Knowledge/Skill
--------------	-----------------

## **p. 25 Rent a Hand - An Enterprise Simulation**

<b>Communications</b>	<b>Skill</b>
<b>Services</b>	
<b>Charging Policy</b>	<b>Knowledge/Skill</b>
<b>Advertising</b>	<b>Skill</b>
<b>Receipts</b>	<b>Skill</b>
<b>Market Research</b>	<b>Skill</b>

## **p.29 Broadway School Project**

<b>Team Problem Solving</b>	<b>Attitude/skill</b>
<b>Communication</b>	<b>Skill</b>
<b>Prioritising</b>	<b>Skill</b>
<b>Banking Practice</b>	<b>Knowledge</b>

## **SCIP NEWS 15**

### **p. 20 Rural Enterprise in Powys**

<b>Costing</b>	<b>Knowledge/Skill</b>
<b>Basic Accounting</b>	<b>Knowledge</b>
<b>Practical Skills</b>	<b>Skill</b>
<b>Need for Cooperation</b>	<b>Attitude</b>

### **p. 22 Trade Union and Enterprise Activities**

<b>Profit</b>	<b>Knowledge/Attitude</b>
<b>Labour</b>	<b>Knowledge</b>
<b>Capital</b>	<b>Knowledge</b>
<b>Learning to cope with Failure</b>	<b>Attitude</b>
<b>Loss of personal Assets</b>	<b>Attitude</b>

Problem Solving	Skill
Negotiation	Skill
Decision Making	Skill
Health and Safety	Knowledge

#### p. 24 Drama and Enterprise

Cooperation	Attitude
Decision Making	Skill
Negotiating a Loan	Knowledge/skill

#### p. 30 Striffids plc - a production simulation

Supply and Demand	Knowledge
Individual production/vs/ batch	Knowledge
Market Forces	Knowledge
Start-up Capital	Knowledge
Use of Materials	Knowledge
Purchase of Equipment	Knowledge/skill
Shift work	Knowledge
Quality Control	Skill/Attitudes
Rates of Pay	Knowledge/attitude
Value Added	Knowledge
Profit and Taxation	Knowledge
Production	Skill
Trade Unions	Knowledge

#### SCIP NEWS 16

No Mini Enterprise Projects Featured



## **SCIP NEWS 17**

### **p.13 Theatre Enterprise Productions**

<b>Finance and Administration</b>	<b>Knowledge/skill</b>
<b>Legal Issues</b>	<b>Knowledge</b>
<b>Security and Safety</b>	<b>Knowledge</b>
<b>Premises</b>	<b>Knowledge</b>
<b>Advertising</b>	<b>Skill</b>
<b>Bank Accounts</b>	<b>Knowledge</b>
<b>Confidence</b>	<b>Attitude</b>

### **p. 15 Woodcroft**

<b>Fixing Price Levels</b>	<b>Knowledge/skill</b>
<b>Advertising</b>	<b>Skill</b>
<b>Bank Accounts</b>	<b>Knowledge</b>
<b>Confidence</b>	<b>Attitude</b>

### **p. 20 Baycroft School Factory Week**

<b>Assembly Line Work</b>	<b>Skill</b>
<b>Pay</b>	<b>Knowledge/Skill</b>
<b>Book Keeping</b>	<b>Knowledge</b>
<b>Typing</b>	<b>Skill</b>
<b>Indexing</b>	<b>Skill</b>
<b>Telephone Communication</b>	<b>Skill</b>
<b>Dealing with Visitors.</b>	<b>Attitude/Skill</b>

## **SCIP NEWS 18**

p. 10 Priory Press

Research activities	<b>Knowledge/Skill</b>
Advertising	<b>Skill</b>
Record information to data files	<b>Skill</b>

## **SCIP 19**

p. 23 Many Hands Make Light Work

Wage Costs	<b>Knowledge</b>
Profits	<b>Knowledge</b>
Forecasting	<b>Skill</b>
Market research	<b>Skill</b>
Advertising	<b>Skill</b>
Selling	<b>Skill</b>

## **SCIP 20**

p.22 Primco Enterprises Theatre Co.

Ticket Selling	<b>Skill</b>
Organisational activities	<b>Knowledge/skill</b>
Financial forecasts	<b>Knowledge/skill</b>
Textiles handling	<b>Skill</b>
Booking Office	<b>Skill</b>
Catering	<b>Skill</b>
Programme and ticket printing	<b>Skill</b>

## **SCIP NEWS 21**

p. 13 Bookworm - a publishing company

Design	Skill
Publicity	Skill
Bank accounts	Knowledge/skill
Book binding	Skill
Report writing	Skill
Publicity and Finance	Knowledge/skill

## **SCIP NEWS 22**

p. 62 Talents for the Talented

Responsibility for money	Attitude
Cooperation	Attitude
Reporting	Skill

## **APPENDIX 2**

### **The Knowledge Skills and Attitudes Used in Mini-Enterprise Activities Identified by Teachers Attending SCIP Conferences 1986 & 1987**

Teachers attending two conferences in 1986 and 1987 were asked as part of the conference activities, to outline their expectations of mini-enterprise activities, the activities their students had been involved in, and some of the 'realities' of the experience. The main categories used for the exercise are listed in this appendix. These headings were part of the data used during the construction of the questionnaire used in the study.

ENTERPRISE - EXPECTATIONS

NAME:

DATE:

Please underline the words that best describe any worries you have about the ENTERPRISE Week

ARRIVING ON TIME	GETTING ON WITH ADULTS FROM SCHOOL
MIXING WITH OTHER ADULTS AND STAFF	WORKING AS A TEAM
MAKING APPOINTMENTS	TRAVELLING ON A BUS
BEING LATE	CLOTHES
WORKING ALONE	FINDING IDEAS
LEARNING NEW SKILLS	TEA BREAKS
SELLING YOURSELF	KNOWING YOUR SKILLS
WORKING LUNCHES	EXPRESSING IDEAS
MAKING DECISIONS	BEING TIRED
MEETING NEW PEOPLE FOR THE FIRST TIME	NOT KNOWING WHAT TO DO
FINDING THINGS DIFFICULT	HELPING OTHERS WITH PROBLEMS
NOT WORKING TO SCHEDULE	THE WAY YOU LOOK
SHARING WORK	HAVING A SMOKE
WHO TO TURN TO FOR HELP	MOTIVATING OTHERS TO WORK
RELATIONSHIPS WITH OPPOSITE SEX	MISSING THE BUS
FEELING FRUSTRATED	

Please underline all the activities you have done during your time on ENTERPRISE and add any others you feel were important:

WORKING AS A TEAM

SOLVING PROBLEMS

LEADING A GROUP

ASKING QUESTIONS

DISCUSSING OTHERS SKILLS AND QUALITIES

CALMING PEOPLE DOWN

DEALING WITH EMERGENCIES

TRAINING OTHERS

ACCEPTING CRITICISM FROM OTHERS

USING NEW TECHNIQUES

WORKING ALONE

ENCOURAGING OTHERS

TAKING RISKS

LISTING OWN SKILLS AND ACHIEVEMENTS

LISTENING TO OTHERS OPINIONS

GIVING OUT INSTRUCTIONS

SITTING AROUND FEELING BORED

FOLLOWING WRITTEN INSTRUCTIONS

LISTENING TO INSTRUCTIONS

ANY OTHERS?

Look at the various activities listed below and use them to fill  
in the bubbles.....

**WORKING AS A TEAM**

**SOLVING PROBLEMS**

**LEADING A GROUP**

**ASKING QUESTIONS**

**DISCUSSING OTHERS SKILLS AND QUALITIES**

**CALMING PEOPLE DOWN**

**DEALING WITH EMERGENCIES**

**TRAINING OTHERS**

**ACCEPTING CRITICISM FROM OTHERS**

**USING NEW TECHNIQUES**

**WORKING ALONE**

**ENCOURAGING OTHERS**

**TAKING RISKS**

**LISTING OWN SKILLS AND ACHIEVEMENTS**

**LISTENING TO OTHERS OPINIONS**

**GIVING OUT INSTRUCTIONS**

**SITTING AROUND FEELING BORED**

**FOLLOWING WRITTEN INSTRUCTIONS**

**LISTENING TO INSTRUCTIONS**

ENTERPRISE - REALITIES

NAME:

DATE:

Please underline any of the following which were real problems for you during ENTERPRISE week:

ARRIVING ON TIME

MIXING WITH OTHER ADULTS AND STAFF

MAKING APPOINTMENTS

BEING LATE

WORKING ALONE

LEARNING NEW SKILLS

EXPRESSING IDEAS

BEING TIRED

NOT KNOWING WHAT TO DO

HELPING OTHERS WITH PROBLEMS

THE WAY YOU LOOK

HAVING A SMOKE

MOTIVATING OTHERS TO WORK

MISSING THE BUS

GETTING ON WITH ADULTS FROM SCHOOL

WORKING AS A TEAM

TRAVELLING ON A BUS

CLOTHES

FINDING IDEAS

WORKING LUNCHES

MAKING DECISIONS

MEETING NEW PEOPLE FOR THE FIRST TIME

FINDING THINGS DIFFICULT

NOT WORKING TO SCHEDULE

SHARING WORK

WHO TO TURN TO FOR HELP

RELATIONSHIPS WITH OPPOSITE SEX

FEELING FRUSTRATED



### CLASS ACTIVITY ANALYSIS

CATEGORY	ACTIVITY
SOCIAL BEHAVIOUR	Role identification Giving instructions Taking instructions Working together Dealing with AOT's
COMMUNICATING	Reading Writing Talking Listening Non-verbal communication Using machines to communicate
USING NUMBERS	Calculations Estimating Measuring Interpreting data Presenting data Spatial processes
PRACTICAL WORK	Manual - basic - with accuracy Using materials Using tools/machines Creative
PROBLEM SOLVING	Recognising a problem Locating information etc Applying information etc Communicating a solution Evaluating the outcome
PERSONAL DEVELOPMENT	Using initiative Taking responsibility Self-motivation Developing confidence Perseverance Self discipline

## **APPENDIX 3**

### **The Knowledge Skills and Attitudes Gained by Students Participating in Mini-Enterprise as Suggested by Teachers Students, Bankers, Industrialists and Trade Union Representatives in a Survey Conducted as part of the Research for this Study**

The returns received from the participants in an initial survey were analysed to identify the key activities thought to be the essential features of mini-enterprise. The statements were then simplified to a key word, to assist in the production of the student questionnaire. The statements collected are listed for each group involved in the survey.

# TABULATED RESPONSES TO INITIAL LETTERS - PUPILS

Absence of Personnel		2
Advertising		19
Accountant		3
Accounts		15
Talking to A.O.T.'s	Communication	10
Talking with teacher	Communication	8
Balance sheets	Accounting	4
Balancing the books	Accounting	2
Bankruptcy	Accounting	1
Making a business plan	Planning	9
Learning how a business should be run	Knowledge	6
Communication skills		16
Designing		3
Listening to everybodys' point of view	Social/C.	4
How to set up a new company	Knowledge	3
Building up my self confidence	Social	11
Costing out a product		11
Making decisions	Planning	3
Using Computer technology to run the company	IT	3
Financial Director	Accounting	2
Managing Director	Personnel	6
Technology Manager	Personnel	2
Production Manager	Personnel	2
Personnel Manager	Personnel	3
Secretary	Personnel	1
Taking instructions is important	Teams	19

# Pupils Cont'd

Coming to joint agreements	Social/Teams	6
Making new friends	Social	10
Manufacturing techniques		10
Manufacturing product		16
Pacing production (too many orders)	Planning/Production	3
Help to develop one's personality	Social	2
How to control a meeting	Social/Groups/ Planning	1
Money management	Accounting	5
Meeting production deadlines	Planning	2
How to make a profit	Motivation	3
How to negotiate a loan	Knowledge/ Accounting	8
Investing in ideas	Accounting	1
Labour relations - encouraging the group	Social/Groups	11
Learning new skills	Planning/Production	4
Developing new ideas	Planning/Production	6
Quality control	Planning/Production	13
Issuing receipts	Accounting	2
Buying raw materials	Planning/Accounting	2
Production line	Planning/Production	3
Record keeping	Accounting	1
Reliability	Social	8
Responsibility	Social	6
Running my own company	Managerial	8
Selling	Planning/Accounting	26
Record keeping	Accounting	3

Pupils Cont'd

Stock control	Accounting	6
Storage of stock	Managerial	1
Theft of stock	Managerial	1
Time keeping	Managerial	10
Type of business - Manufacturing		16
Type of business - Service		5
Market surveys (Market Research)	Planning	10
Team building was important	Team Building	33
Trust	Social	1
Working with other people	Groups	22
Not to work with family or friends	Social	6
Working hard	Social	7
Interest in Industry/Business		10
Visiting local businesses	Interest in Bus/ Ind	4
Planning	Planning	3
Compromise	Social	2
Coming to terms with failure	Social	2
Innovation	Planning/Production	1
Competition	Planning/Accounting	2
Constructive criticism (Advise)	Social	6
Motivation	Social	3
Perseverance	Social	2
Board meetings	Planning/Groups	3
Satisfaction of doing a job well	Social	1
Negotiating	Groups/Social	3

"

Pupils Cont'd

Marketing plan

Planning/Accounting 1

The value of share holders to co.

Accounting 1

**TABULATED RESPONSES TO INITIAL LETTER - BANKS/COMMERCE**

Business cycles	Knowledge	1
Financial systems	Knowledge	2
Management	Skill	1
Organisational structures	Knowledge	1
Lines of communication within a company	Knowledge	2
Levels of authority/leadership skill	Knowledge	4
Codes of good practice	Knowledge	1
Confidence building	Attitude	1
Being committed	Attitude	1
Learning to make compromises	Skill	1
Decision making	Skill	1
Delegation	Skill	2
Planning	Skill	2
Selling Technique	Knowledge	1
Record keeping	Knowledge	1
Time management	Skill	1
Teamwork	Attitude	4
Coming to terms with failure	Attitude	1
How and when to take advice and constructive criticism	Attitude	1
Finance	Knowledge	1
Stock control	Knowledge	1
Manufacture of products	Knowledge	1
Production	Knowledge	1
Marketing	Knowledge/Skill	2
Selling	Knowledge/Skill	2
Successful businesses are hard work	Attitude	1

Banks/Commerce Cont'd

Need to produce a price structure that ensures profits	Attitude	1
Competition does have meaning in the business world	Attitude	1
Life after school is not 'a bed of roses'	Attitude	1



**TABULATED RESPONSES TO INITIAL LETTER - TRADE UNIONISTS**

Working as a team	Skill/Knowledge	1
Negotiating skills	Skill	1
Planning	Skill	1
Time organisation	Skill	1
Awareness of the needs of others	Attitude	1
Responsibility	Attitude	1
Authority	Attitude	1
Communication	Skill	1
Decision making	Skill	1

**TABULATED RESPONSE TO THE INITIAL LETTER - SILO/SCIP/TEACHERS**

Advertising	Skill	2
How a business is run	Knowledge	5
Be able to prepare a business plan	Knowledge	1
Keep accounts	Skill	3
Be able to draw up a cash flow forecast	Knowledge	1
Communication skills	Skill	4
Develop self confidence	Attitude	1
How money circulates	Knowledge	3
Understand need for marketing	Knowledge	2
Understand need for investment	Knowledge	2
Show flexibility	Attitude	1
Co-operate with others	Attitude	5
Be able to cope with failure	Attitude	2
Understand concepts of supply/demand	Knowledge	2
Market research	Knowledge	3
Loyalty	Attitude	2
Quality control	Knowledge	3
Production control	Knowledge	2
Balance sheets/financial records	Knowledge	2
Health and safety considerations	Knowledge	3
The importance of trade unions	Knowledge	2
Production lines/division of labour	Knowledge	1
An appreciation of the enterprise economy	Knowledge	1
Design and make products	Skill	3
To use materials effectively and efficiently	Skill	1
To work in a team	Skill	5

SILO/SCIP/TEACHERS Cont'd

To solve problems	Skill	2
Decision making	Skill	2
To be able to negotiate	Skill	1
To be able to evaluate risks	Skill	2
To be able to work independently	Skill	4
To develop leadership skills	Skill	2
To develop creativity	Skill	2
To develop an appreciation of the needs of others	Attitude	4
Develop awareness of concept of equal opportunities	Attitude	1
Honest	Attitude	2
Responsibility	Attitude	2
Reliability	Attitude	2
Good time keeping	Attitude	1
To be able to meet deadlines	Skill	2
Be self motivated	Attitude	4
Determination/perseverance	Attitude	2
Understand how school relates to outside world	Knowledge	1
Selling	Knowledge	2
Negotiation	Skill	1
Understand how to give value for money	Attitude	1

**TABULATED RESPONSES TO INITIAL LETTER - INDUSTRIALISTS**

Accounts	Knowledge	1
Allocation of resources	Knowledge	1
Borrowing money	Knowledge	1
Company Organisation	Knowledge	5
Communication skills	Skill	2
Commitment	Attitude	1
Self confidence	Attitude	1
Costing	Knowledge	1
Co-ordination	Skill	2
Developing new ideas	Skill	2
Self discipline	Attitude	3
Finance	Knowledge	1
Enthusiasm	Attitude	1
Flexibility	Skill	1
Coming to terms with failure	Attitude	2
Honesty	Attitude	1
Integrity	Attitude	1
Loyalty	Attitude	1
Taking instruction from superiors or those with knowledge	Attitude	1
Sharing common goals	Attitude	3
Markets (understanding)	Knowledge	2
Market research	Knowledge	1
Manufacturing methods	Knowledge	3
Selling methods	Knowledge	1
Motivating skills	Skill	2
Meetings	Skill	4

**Industrialists Cont'd**

<b>Selling skills</b>	<b>Skill</b>	<b>2</b>
<b>Shares</b>	<b>Knowledge</b>	<b>1</b>
<b>Negotiating skills</b>	<b>Skill</b>	<b>3</b>
<b>Leadership/working in teams/delegation</b>	<b>Skill</b>	<b>5</b>
<b>Organisational skills</b>	<b>Skill</b>	<b>3</b>
<b>Personnel</b>	<b>Knowledge</b>	<b>1</b>
<b>Production planning (function of marketing)</b>	<b>Knowledge</b>	<b>2</b>
<b>Planning</b>	<b>Knowledge</b>	<b>3</b>
<b>Reviewing work</b>	<b>Skill</b>	<b>1</b>
<b>Quality</b>	<b>Attitude</b>	<b>1</b>
<b>Record keeping</b>	<b>Skill</b>	<b>3</b>
<b>Responsibility</b>	<b>Attitude</b>	<b>3</b>
<b>Time keeping</b>	<b>Attitude</b>	<b>2</b>
<b>Teamwork (different depts. working together)</b>	<b>Attitude</b>	<b>8</b>
<b>Initiative</b>	<b>Attitude</b>	<b>1</b>
<b>Need to invest, both money and hard work</b>	<b>Attitude</b>	<b>1</b>
<b>Earning your salary</b>	<b>Attitude</b>	<b>2</b>
<b>Understanding people</b>	<b>Knowledge</b>	<b>2</b>

## **APPENDIX 4**

### **The Pilot Questionnaire Used in the Study**

FORM 123

Paper No.

---

## **Pupils' opinions about industrial matters**

---

Pupils name :- \_\_\_\_\_  
(Block Capitals please)

School name \_\_\_\_\_  
(Block Capitals please)

Please indicate whether you are **MALE or FEMALE**  
(delete which does not apply)

Please indicate your age in years **13, 14, 15, 16, 17**  
(delete those which do not apply)

Although you have been asked to put your name on the questionnaire, this is only to assist with the administration, it is not to assess you or your knowledge in any way.

The following questionnaire will ask you to comment about a variety of statements. There is no time limit, but normally your first reaction is the one which best reflects your feelings, so avoid pondering for too long over any single statement in the questionnaire.

There are no right or wrong answers. We simply want to know your feelings about each of the statements and all answers will be confidential.

In the first part of the questionnaire you will find a series of statements. You are asked to read each statement and then record whether you:

1. Completely agree with the statement without any reservations  
- in which case you should tick the box marked - **(SA) Strongly Agree**
2. Tend to agree with it but feel there could be exceptions  
- in which case you should tick the box marked - **(A) Tend to Agree**
3. Tend to disagree with it but feel there may be occasional exceptions  
- in which case you should tick the box marked - **(D) Disagree**
4. Completely disagree with the statement without any exceptions  
- in which case you should tick the box marked - **(SD) Strongly Disagree**

Do not spend too long on each statement. Read it carefully, consider your feelings about it, and record them in one of the four boxes at the side of the statement. You must only tick one of the four spaces.

Then proceed to the next statement.

Once you have recorded your feelings, resist the temptation to go back and change it.

Remember it is your feelings that we want to know about, so please do not discuss your responses with anyone. If there is something you do not quite understand ask the teacher for help.



	Strongly Agree	Agree	Tend to disagree	Disagree
	SA	A	TD	D
1. I tend to work well when I work with others.				
2. I find it more difficult to concentrate on a school project than I do when I am working at a job outside school.				
3. Adults tend not to take my ideas seriously because I am at school.				
4. Adults are often able to give me useful suggestions to help overcome my problems.				
5. I feel that if a job is worth doing, it is worth doing well.				
6. If I dislike doing a job, I tend to do it quickly to get it out of the way.				
7. I feel that work is more enjoyable if you are doing it with friends.				
8. Discussions are more successful when someone is in control.				
9. I find that it is more difficult to get things done when I am working in a team.				
10. It is useful to be able to discuss a problem with other people.				
11. I find it easier to work when I know what the end product will be.				
12. When I am in doubt, I find it is usually best to seek advice from others.				
13. If I say I will do something, I try to ensure that I complete the task.				
14. I tend to work better when someone comments on the quality of my work.				
15. I do not like working with others who fool around when there is work to be done.				
16. Everyone does something well.				

	Strongly Agree	Agree	Tend to disagree	Disagree
	SA	A	TD	D
17. Better decisions tend to be made when the problem is discussed fully before hand.				
18. A job is usually done more easily when many people are involved.				
19. I enjoy meeting people of all ages.				
20. I usually find talking to strangers difficult.				
21. I generally find it easy to persuade people to accept my point of view.				
22. I usually do my best work when I am left alone to get on with the job.				
23. It is better to try out a new idea and fail than not to try out new ideas at all.				
24. Giving instructions to people you know is usually more difficult than giving instructions to strangers.				
25. I find it difficult to deal with people who are angry.				
26. I tend to find controlling my frustrations difficult.				
27. I'd rather get on with a job than spend time talking about it.				
28. I enjoy making things.				
29. I usually cope well when something unexpected happens.				
30. If I arrange to meet someone, I try to make sure that I arrive on time.				
31. I enjoy working with people of the opposite sex.				
32. I enjoy learning about new ways of tackling problems.				

	Strongly Agree	Agree	Tend to disagree	Disagree
	SA	A	TD	D
33. I prefer to learn new skills by using them in a real work task.				
34. I am generally popular with other pupils.				
35. I usually find it easy to work without supervision.				
36. I find it easy to make myself understood by adults and people my own age.				
37. I usually keep working at a problem until I find a solution.				
38. If I see a task that needs doing, I usually tackle it without waiting for instructions from others.				
39. I generally like to collect all the relevant information before making decisions about a problem.				
40. Working in industry tends to be hard work.				
41. I like to tackle challenging tasks.				
42. I find talking to people is the best way of finding out about new ideas.				
43. I tend to work better when I have competition at school.				
44. I feel that discussing my problems with others reveals my weaknesses.				
45. It is important to be honest when working with others.				
46. I feel that the person with the loudest voice often makes the best leader.				
47. I tend to project a confident image to others.				
48. My first reaction about the quality of an idea tends to be correct.				

	Strongly Agree	Agree	Tend to disagree	Disagree
	SA	A	TD	D
49. I tend to be very self critical of my work at school.				
50. I do not like sharing my ideas with others.				
51. I tend to find it difficult to work with lazy people.				
52. When I am given a difficult job to do at school, I generally do not give up easily.				
53. I tend to work better when the boss is male.				
54. I usually respond well to being given a position of trust.				
55. I am usually at my best in an emergency.				
56. Working in an office tends to be easier than working in a factory.				
57. I enjoy making money.				
58. I feel I would enjoy working for myself.				

## PART 2

In this part of the questionnaire, you are asked to read each of the statements.

Then you should read each of the four comments underneath.

Finally you are asked to number the comments, number 1 for that which you feel most reflects your view, down to 4 for the comment which you feel least reflects the way you feel.

**Please number all the comments.**

Here is an example:-

Secondary schools help to prepare pupils for work in industry of business by:-

- |  |                      |
|--|----------------------|
| a) Providing opportunities for pupils to work as a team.                                     | <input type="text"/> |
| b) Teaching subjects which provide the knowledge necessary for work in business or industry. | <input type="text"/> |
| c) Helping pupils to gain qualifications.  | <input type="text"/> |
| d) Showing the value of business and industry to the country's economy.                      | <input type="text"/> |

If you feel that comment 'c' is the answer which most reflects your feelings, you should place 1 in the space at the side of comment 'c'.

if you feel that comment 'b' is the next most accurate answer for you, then you would place 2 at the side of statement 'b', and so on until each comment had a number from 1 to 4 against it. do not place any number more than once against the comments within each section.

Please number order of  
preference



1. On discovering theft of company property I would:-

- a) Sack all the staff.
- b) Tighten the company's security arrangements.
- c) Discuss the problem with my staff.
- d) Plan a way of catching those responsible.

2. If staff were consistently late for work I would:-

- a) Dismiss them after several warnings.
- b) Discuss the cause of the problem with them.
- c) Arrange for all employees to start later.
- d) Ignore the problem and hope that things would improve in time.

3. I would like to run my own company if:-

- a) I had a brilliant idea for a product or service.
- b) I had a partner who knew what they were doing.
- c) I had so much money it didn't matter if the business failed.
- d) I couldn't get a job with a large company.

4. The key to successful selling is:-

- a) Spending a lot of money on advertising.
- b) Carefully planning how best to sell your product or service.
- c) Giving high bonuses for sales to the sales staff.
- d) Charging less for your product(s) or service(s) than your competitors.



Please number order of  
preference

5. Some companies encourage their employees to work as a team because:-

- a) It overcomes the individual's weaknesses.
- b) It produces more useful ideas.
- c) It prevents unhealthy competition within the company.
- d) It enable the boss to have more control over his employees.

6. It is important for senior employees to discuss the running of the company because:-

- a) It is too difficult for one person to run the company on their own.
- b) It is important for the people in the company to share their ideas.
- c) Problems can be identified quickly.
- d) It is a more democratic way of making decisions.

7. The best way of producing new ideas is:-

- a) To hold a competition.
- b) To have a session where everybody contributes their ideas.
- c) To look at what your competitors are doing.
- d) To pay your employees a good bonus for every new idea they suggest which is used by the company.

8. The best way of ensuring a successful product or service is:-

- a) To seek the opinion of people who might buy it before starting production.
- b) To make sure that it is cheap.
- c) To ensure there are no competitors.
- d) To advertise it well on television.

Please number order of  
preference



9. Better products are made on a production line because:-

- a) All products are of similar quality.
- b) It cuts the cost of production.
- c) The average worker could not be expected to learn how to do everything.
- d) The product can be produced more quickly than it would be if it were produced by one person from beginning to end.

10. A company needs to make a profit to:-

- a) Make the owner(s) rich.
- b) To ensure that the workforce keep their jobs.
- c) To enable the company to survive during bad times.
- d) To enable it to invest in new ideas for the future.

11. If a company has so many orders that it cannot supply the goods to the customer on the day that they were promised, it should:-

- a) Refuse to return the customers telephone calls in case they make a complaint.
- b) Sack the sales manager.
- c) Tell the customer the problem and hope that they understand.
- d) Speed up the production line and make everybody work overtime to try and finish the order on time.

12. The best way to ensure that the company doesn't have problems with trade unions is to:-

- a) Persuade the worker to sign an agreement not to go on strike
- b) Ban the trade unions from operating within the company.
- c) Pay the workforce well.
- d) Enable all employees to voice their concerns to the management on a regular basis.



Please number order of  
preference



13. The best way of raising money to start a company is to:-

- a) Get a loan from the bank. ☐
- b) Get together with other people who will all share an equal part of the cost of starting the company. ☐
- c) Get a grant from the Government or the local council. ☐
- d) Sell some of your possessions to raise the money required to start the business. ☐

14. Advertising is a way of:-

- a) Informing the public about the company's products. ☐
- b) Increasing sales. ☐
- c) Improving the company's public image. ☐
- d) Ensuring that the company does not lose sales to a competitor. ☐

15. It is important for a company to keep accurate financial records because:-

- a) It helps to plan production. ☐
- b) It would be difficult to prepare a statement for the tax officer without accurate information. ☐
- c) It prevents the company selling products at a loss. ☐
- d) It helps to prevent theft from the company. ☐

16. The best way to learn how to start a new business is:-

- a) To start a company and learn from your mistakes as you go along. ☐
- b) To employ someone who has the necessary expertise. ☐
- c) To pay for a short course in business management. ☐
- d) To seek advice from a successful business person. ☐

Please number order of  
preference

17. The best way to ensure that your company produces good quality products is:-

- a) To design the product so that it can be made easily without the need for special skills.
- b) To have a series of quality control checks.
- c) Give a guarantee with each product sold.
- d) Organise courses to ensure that all employees take the idea of product quality seriously.

18. If a product is not selling well the best plan is to:-

- a) Stop production and sell the remaining stock of the products at cut price.
- b) Try to sell the product in different markets.
- c) Try to cut the cost of production.
- d) Pay for more advertising.

19. If you asked a bank to lend your business some money they would:-

- a) Ask your parents to guarantee to pay off the loan if the business failed.
- b) Ask you to discuss what you wanted the money for and how you intended to pay them back.
- c) Ask how much money you expected to make during the first year of the business.
- d) Ask to see last years set of accounts.

20. It is important for a business to conduct market research because:-

- a) It helps to produce a plan of action.
- b) It helps the company to advertise its product or service.
- c) It helps the company to design its products or service to suit public taste.
- d) It provides information which helps the company to sell its products or services at a price people are willing to pay.

**You have now completed the questionnaire**

**Thank you for taking part**

## **APPENDIX 5**

### **The Questionnaire Used in the Study**

FORM A

C

Paper No.

---

## Pupils' opinions about industrial matters

---

Your name :- \_\_\_\_\_  
(Block Capitals please)

Your School's name \_\_\_\_\_  
(Block Capitals please)

Please circle to indicate whether you are MALE or FEMALE

Please circle your age in years 13, 14, 15, 16, 17

Although you have been asked to put your name on the questionnaire, this is only to assist with the administration, it is not to assess you or your knowledge in any way.

The following questionnaire will ask you to comment about a variety of statements. There is no time limit, but normally your first reaction is the one which best reflects your feelings, so avoid thinking for too long over any single statement in the questionnaire.

There are no right or wrong answers. We simply want to know your feelings about each of the statements and all answers will be confidential.

#### **PART 1**

In the first part of the questionnaire you will find a series of statements. You are asked to read each statement and then record whether you:

1. Completely agree with the statement without any reservations  
- in which case you should tick the box marked - (SA) Strongly Agree
2. Tend to agree with it but feel there could be exceptions  
- in which case you should tick the box marked - (A) Tend to Agree
3. Tend to disagree with it but feel there may be occasional exceptions  
- in which case you should tick the box marked - (D) Disagree
4. Completely disagree with the statement without any exceptions  
- in which case you should tick the box marked - (SD) Strongly Disagree

Do not spend too long on each statement. Read it carefully, consider your feelings about it, and record them in one of the four boxes at the side of the statement. You must only tick one of the four spaces.

Then proceed to the next statement.

Once you have recorded your feelings, resist the temptation to go back and change it.

Remember it is your feelings that we want to know about, so please do not discuss your responses with anyone. If there is something you do not quite understand ask the teacher for help.

	Strongly Agree	Agree	Tend to disagree	Disagree
	SA	A	TD	D
1. I tend to work well when I work with others.				
2. I find it more difficult to concentrate on a school project than I do when I am working at a job outside school.				
3. Adults tend not to take my ideas seriously because I am at school.				
4. Adults are often able to give me useful suggestions to help overcome my problems.				
5. If I dislike doing a job, I tend to do it quickly to get it out of the way.				
6. I feel that work is more enjoyable if you are doing it with friends.				
7. Discussions are more successful when someone is in control.				
8. I find that it is more difficult to get things done when I am working in a team.				
9. I find it easier to work when I know what the end product will be.				
10. When I am in doubt, I find it is usually best to seek advice from others.				
11. If I say I will do something, I try to ensure that I complete the task.				
12. I tend to work better when someone comments on the quality of my work.				
13. Everyone does something well.				
14. Better decisions tend to be made when the problem is discussed fully before hand.				
15. A job is usually done more easily when many people are involved.				
16. I usually find talking to strangers difficult.				

	<div>Strongly Agree</div> <div>Agree</div> <div>Tend to disagree</div> <div>Disagree</div>			
	SA	A	TD	D
17. I generally find it easy to persuade people to accept my point of view.				
18. I usually do my best work when I am left alone to get on with the job.				
19. Giving instructions to people you know is usually more difficult than giving instructions to strangers.				
20. I find it difficult to deal with people who are angry.				
21. I tend to find controlling my frustrations difficult.				
22. I'd rather get on with a job than spend time talking about it.				
23. I enjoy making things.				
24. I usually cope well when something unexpected happens.				
25. I enjoy working with people of the opposite sex.				
26. I prefer to learn new skills by using them in a real work task.				
27. I am generally popular with other pupils.				
28. I usually find it easy to work without supervision.				
29. I find it easy to make myself understood by adults and people my own age.				
30. I usually keep working at a problem until I find a solution.				
31. If I see a task that needs doing, I usually tackle it without waiting for instructions from others.				
32. I generally like to collect all the relevant information before making decisions about a problem.				



	Strongly Agree	Agree	Tend to disagree	Disagree
	SA	A	TD	D
33. Working in industry tends to be hard work.				
34. I like to tackle challenging tasks.				
35. I find talking to people is the best way of finding out about new ideas.				
36. I tend to work better when I have competition at school.				
37. I feel that discussing my problems with others reveals my weaknesses.				
38. It is important to say what you think when working with others.				
39. I feel that the person with the loudest voice often makes the best leader.				
40. I tend to project a confident image to others.				
41. My first reaction about the quality of an idea tends to be correct.				
42. I tend to be very self critical of my work at school.				
43. I do not like sharing my ideas with others.				
44. When I am given a difficult practical task to do at school, I try to complete it successfully.				
45. I tend to work better when the boss is male.				
46. I usually respond well to being given a position of trust.				
47. I am usually at my best in an emergency.				
48. Working in an office tends to be easier than working in a factory.				

	Strongly Agree	Agree	Tend to disagree	Disagree	
	SA	A	TD	D	
49. I do not mind working hard if I know I am going to make some money.					
50. I feel I would enjoy working for myself.					

Please continue with PART 2 on the next page



## PART 2

In this part of the questionnaire, you are asked to read each of the statements.

Then you should read each of the four comments underneath.

Finally you are asked to number the comments, number 1 for that which you feel most reflects your view, down to 4 for the comment which you feel least reflects the way you feel.

**Please number all the comments.**

Here is an example:-

Secondary schools help to prepare pupils for work in industry of business by:-

a) Providing opportunities for pupils to work as a team.

b) Teaching subjects which provide the knowledge necessary for work in business or industry.

c) Helping pupils to gain qualifications.

d) Showing the value of business and industry to the country's economy.

If you feel that comment 'c' is the answer which most reflects your feelings, you should place 1 in the box at the side of comment 'c'.

If you feel that comment 'b' is the next most accurate answer for you, then you would place 2 in the box by the side of comment 'b', and so on until each comment had a number from 1 to 4 against it. Do not place any number more than once against the comments within each section.

Please number order of  
preference

1. On discovering theft of company property I would:-

a) Sack all the staff.

b) Tighten the company's security arrangements.

c) Discuss the problem with my staff.

d) Plan a way of catching those responsible.

2. If staff were consistently late for work I would:-

a) Dismiss them after several warnings.

b) Discuss the cause of the problem with them.

c) Arrange for all employees to start later.

d) Ignore the problem and hope that things would  
improve in time.

3. I would like to run my own company if:-

a) I had a brilliant idea for a product or service.

b) I had a partner who knew what they were doing.

c) I had so much money it didn't matter if the business  
failed.

d) I couldn't get a job with a large company.

4. The key to successful selling is:-

a) Spending a lot of money on advertising.

b) Carefully planning how best to sell your product or  
service.

c) Giving high bonuses for sales to the sales staff.

d) Charging less for your product(s) or service(s) than  
your competitors.

Please number order of  
preference

5. Some companies encourage their employees to work as a team because:-

a) It overcomes the individual's weaknesses.

\_\_\_\_\_

b) It produces more useful ideas.

\_\_\_\_\_

c) It prevents unhealthy competition within the company.

\_\_\_\_\_

d) It enables the boss to have more control over his/her employees.

\_\_\_\_\_

6. It is important for senior employees to discuss the running of the company because:-

a) It is too difficult for one person to run the company on their own.

\_\_\_\_\_

b) It is important for the people in the company to share their ideas.

\_\_\_\_\_

c) Problems can be identified quickly.

\_\_\_\_\_

d) It is a more democratic way of making decisions.

\_\_\_\_\_

7. The best way of producing new ideas is:-

a) To hold a competition.

\_\_\_\_\_

b) To have a session where everybody contributes their ideas.

\_\_\_\_\_

c) To look at what your competitors are doing.

\_\_\_\_\_

d) To pay your employees a good bonus for every new idea they suggest which is used by the company.

\_\_\_\_\_

8. The best way of ensuring a successful product or service is:-

a) To seek the opinion of people who might buy it before starting production.

\_\_\_\_\_

b) To make sure that it is cheap.

\_\_\_\_\_

c) To ensure there are no competitors.

\_\_\_\_\_

d) To advertise it well on television.

\_\_\_\_\_

Please number order of  
preference

9. Better products are made on a production line because:-

a) All products are of similar quality.

\_\_\_\_\_

b) It cuts the cost of production.

\_\_\_\_\_

c) The average worker could not be expected to learn how to do everything.

\_\_\_\_\_

d) The product can be produced more quickly than it would be if it were produced by one person from beginning to end.,,

\_\_\_\_\_

10. A company needs to make a profit to:-

a) Make money for the owner(s).

\_\_\_\_\_

b) To ensure that the workforce keep their jobs.

\_\_\_\_\_

c) To enable the company to survive during bad times.

\_\_\_\_\_

d) To enable it to invest in new ideas for the future.

\_\_\_\_\_

11. If a company has so many orders that it cannot supply the goods to the customer on the day that they were promised, it should:-

a) Refuse to return the customers telephone calls in case they make a complaint.

\_\_\_\_\_

b) Sack the sales manager.

\_\_\_\_\_

c) Tell the customer the problem and hope that they understand.

\_\_\_\_\_

d) Speed up the production line and make everybody work overtime to try and finish the order on time.

\_\_\_\_\_

12. The best way to ensure that the company doesn't have problems with trade unions is to:-

a) Persuade the workers to sign an agreement not to go on strike

\_\_\_\_\_

b) Ban the trade unions from operating within the company.

\_\_\_\_\_

c) Pay the workforce well.

\_\_\_\_\_

d) Enable all employees to voice their concerns to the management on a regular basis.

\_\_\_\_\_



Please number order of  
preference

13. The best way of raising money to start a company is to:-

- a) Get a loan from the bank.
- b) Get together with other people who will all share an equal part of the cost of starting the company.
- c) Get a grant from the Government or the local council.
- d) Sell some of your possessions to raise the money required to start the business.

☐☐☐☐

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14. Advertising is a way of:-

- a) Informing the public about the company's products.
- b) Increasing sales.
- c) Improving the company's public image.
- d) Ensuring that the company does not lose sales to a competitor.

☐☐☐☐

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15. It is important for a company to keep accurate financial records because:-

- a) It helps to plan production.
- b) It would be difficult to prepare a statement for the tax officer without accurate information.
- c) It prevents the company selling products at a loss.
- d) It helps to prevent theft from the company.

☐☐☐☐

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16. The best way to learn how to start a new business is:-

- a) To start a company and learn from your mistakes as you go along.
- b) To employ someone who has the necessary expertise.
- c) To pay for a short course in business management.
- d) To seek advice from a successful business person.

☐☐☐☐

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Please number order of  
preference



17. The best way to ensure that your company produces good quality products is:-

- a) To design the product so that it can be made easily without the need for special skills.
- b) To have a series of quality control checks.
- c) Give a guarantee with each product sold.
- d) Organise courses to ensure that all employees take the idea of product quality seriously.

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18. If a product is not selling well the best plan is to:-

- a) Stop production and sell the remaining stock of the products at cut price.
- b) Try to sell the product in different markets.
- c) Try to cut the cost of production.
- d) Pay for more advertising.

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19. If you asked a bank to lend your business some money they would:-

- a) Ask your parents to guarantee to pay off the loan if the business failed.
- b) Ask you to discuss what you wanted the money for and how you intended to pay them back.
- c) Ask how much money you expected to make during the first year of the business.
- d) Ask to see last years set of accounts.

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20. It is important for a business to conduct market research because:-

- a) It helps to produce a plan of action.
- b) It helps the company to advertise its product or service.
- c) It helps the company to design its products or service to suit public taste.
- d) It provides information which helps the company to sell its products or services at a price people are willing to pay.

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**You have now completed the questionnaire**

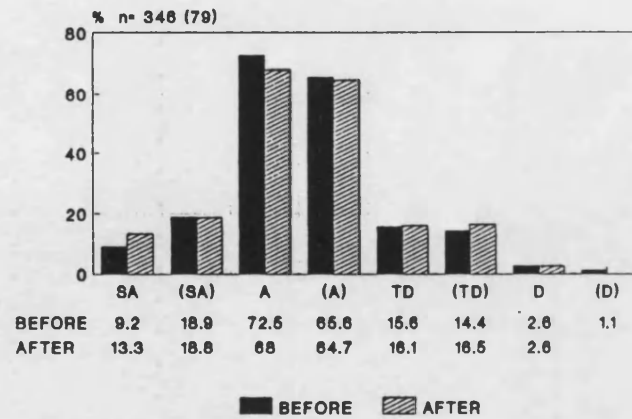
**Thank you for taking part**

## **APPENDIX 6**

### **A Graphical Representation of the Statistical Analysis of the Data Collected from the Completed Questionnaires**

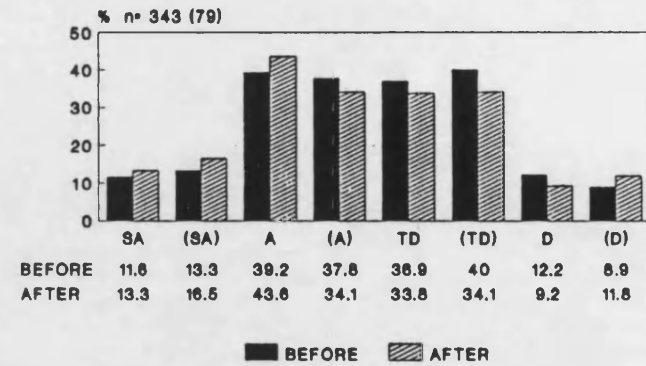
The data is presented in a tabulated form in Chapter 4 of the Thesis

Q A1 I tend to work well with others



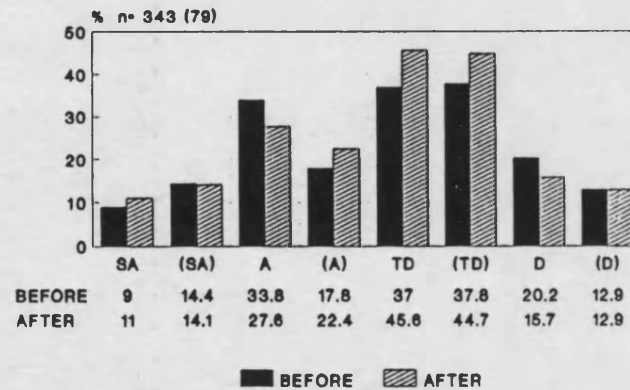
Corr.Co = .2437(.....) P= .000(P= ....)  
 Mean = 2.1156 (1.9778) / 2.0807(1.9785)  
 St.Dev = .5883 (.6177) / .6263(.5971)

Q A2 I find it more difficult to concentrate on a school project than I do when working on a job outside school



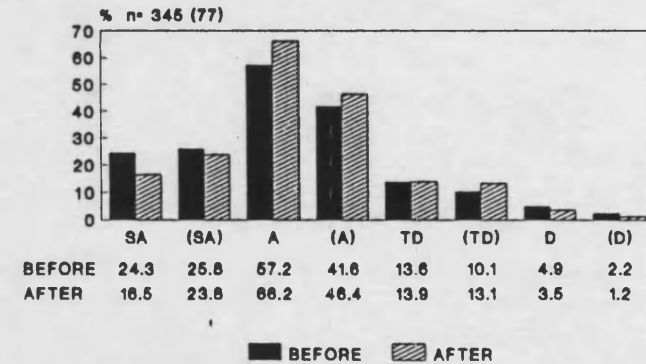
Corr.Co = .2844(.4774) P= .000(P= .000)  
 Mean = 2.4971 (2.4444) / 2.3902(2.4118)  
 St.Dev = .8537 (.8361) / .8311(.9036)

Q A3 Adults tend not to take me seriously because I am at school.



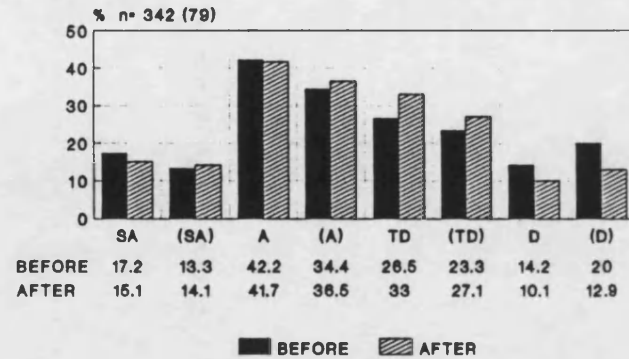
Corr.Co = .3738(-.1174) P= .000(P= .303)  
 Mean = 2.6860 (3.0778) / 2.6599(2.7847)  
 St.Dev = .8956 (1.7878) / .8727(1.6169)

Q A4 Adults are often able to give me useful suggestions to help me overcome my problems



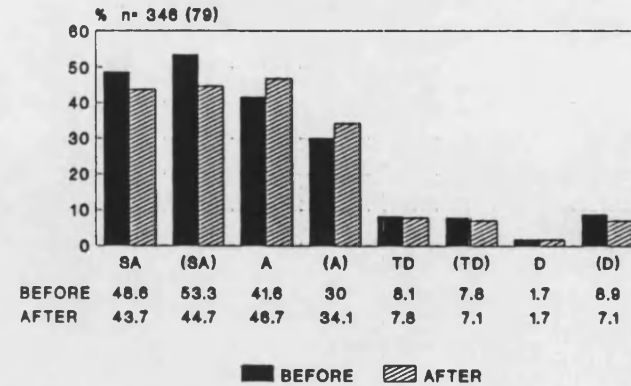
Corr.Co = .2937(.5918) P= .000(P= .000)  
 Mean = 2.1156 (1.9778) / 2.0807(1.9785)  
 St.Dev = .5883 (.6177) / .6263(.5971)

Q A5 If I dislike doing a job, I tend to do it quickly to get it out of the way.



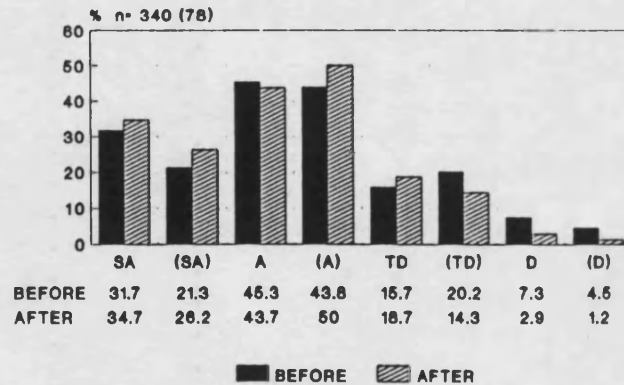
Corr.Co = .3001(.5748) P= .000(P= .000)  
Mean = 2.3799 (2.7667) / 2.3626(2.6708)  
St.Dev = .9303 (1.1808) / .8618(1.1687)

Q A6 I feel that work is more enjoyable if you are doing it with friends



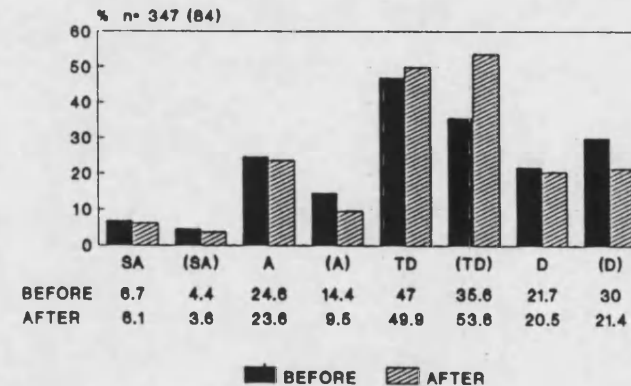
Corr.Co = .3141(-.053) P= .000(P= .842)  
Mean = 2.1156 (1.9778) / 2.0807(1.9766)  
St.Dev = .5883 (.6177) / .6263(.6971)

Q A7 Discussions are more succesful when someone is in control.



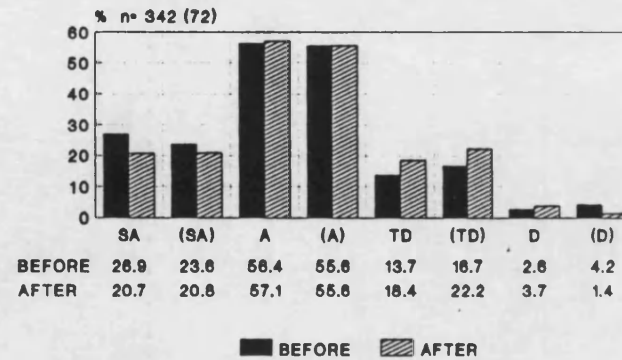
Corr.Co = .3725(.6689) P= .000(P= .000)  
Mean = 1.9866 (2.5281) / 1.8980(2.2738)  
St.Dev = .8766 (1.6462) / .8010(1.6660)

Q A8 I Find It more Difficult to get things done when I am working in teams



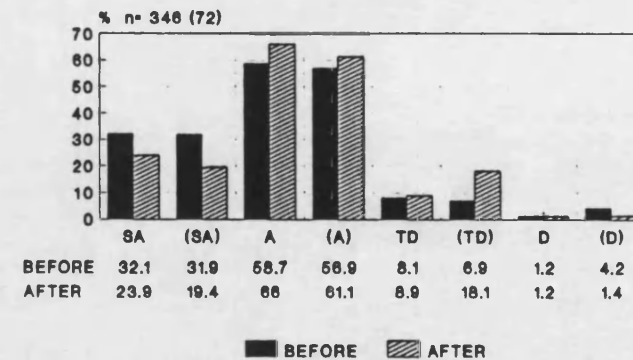
Corr.Co = .2360(.4653) P= .000(P= .000)  
Mean = 2.1156 (1.9778) / 2.0807(1.9766)  
St.Dev = .5883 (.6177) / .6263(.6971)

Q A9 I find It easier to work when I know what the end product will be



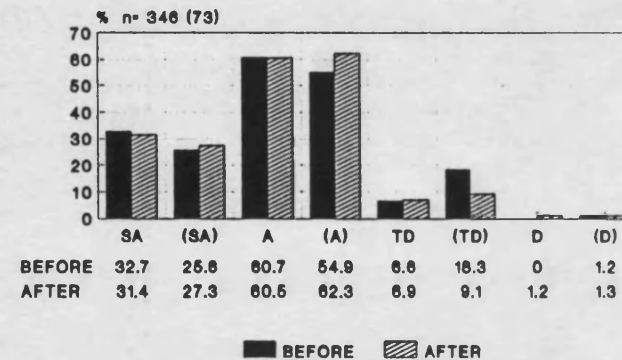
Corr.Co = .2310(.5278) P= .000(P= .000)  
Mean = 1.9298 (2.0139) / 2.0519(2.0417)  
St.Dev = .7132 (.7598) / .7353(.7009)

Q A10 When I am in doubt I find It is usually best to seek the advice of others.



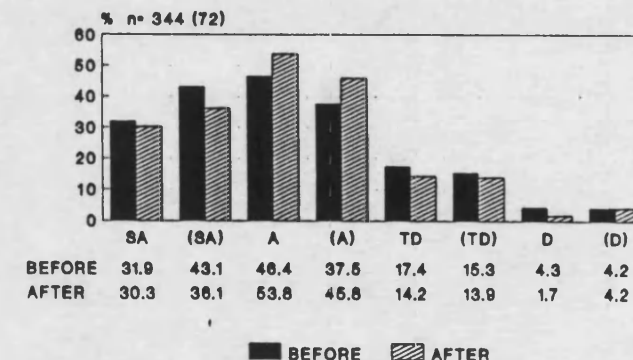
Corr.Co = .1802(.3548) P= .005(P= .002)  
Mean = 1.7832 (1.8333) / 1.8732(2.0139)  
St.Dev = .6124 (.7316) / .6997(.6606)

Q A11 If I say I will do something, I will try to ensure that I complete the task



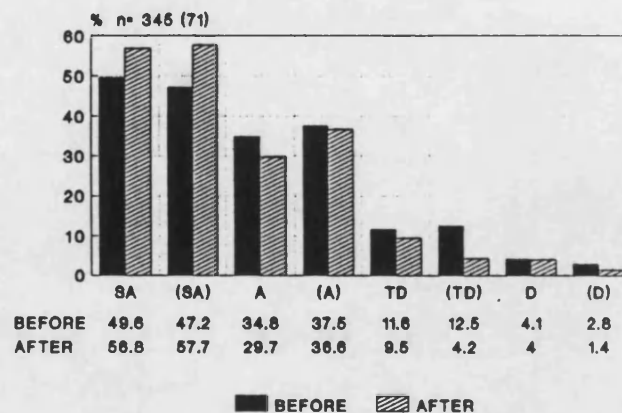
Corr.Co = .2952(.4684) P= .000(P= .000)  
Mean = 1.7399 (1.9512) / 1.7781(1.8442)  
St.Dev = .5713 (.7010) / .6175(.6296)

Q A12 I tend to work better when someone comments on the quality of my work



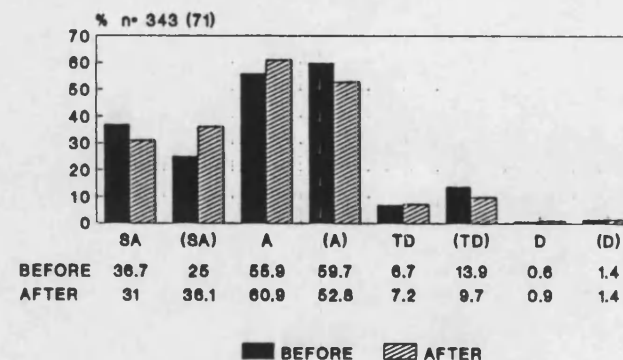
Corr.Co = .2050(.5943) P= .000(P= .000)  
Mean = 1.9420 (1.8056) / 1.8726(1.8611)  
St.Dev = .8166(.8498) / .7069(.8102)

Q A13 Everyone does something well



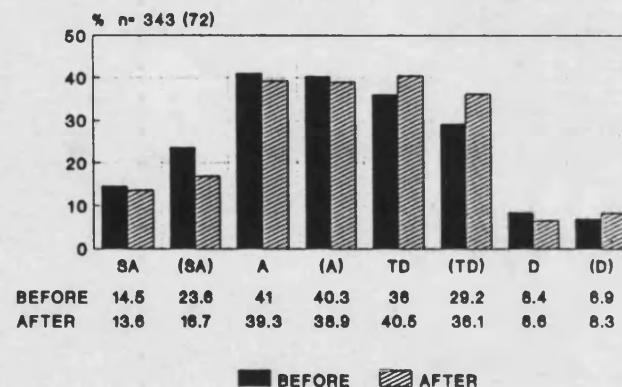
Corr.Co = .3480(.3540) P= .000(P= .002)  
 Mean = 1.7014 (1.7083) / 1.6081(1.4930)  
 St.Dev = .8287 (.7950) / .8201(.8519)

Q A14 Better decisions are made when the problem is discussed fully before hand



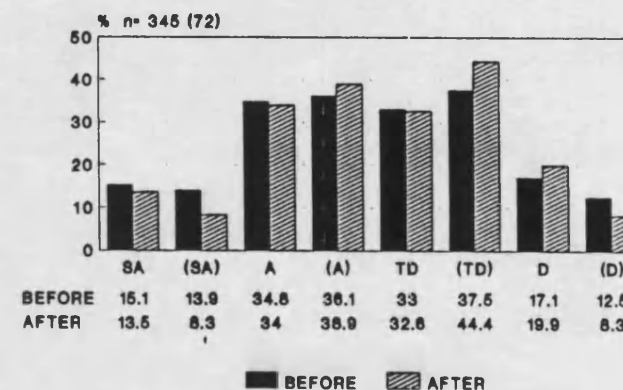
Corr.Co = .1883(.3804) P= .001(P= .001)  
 Mean = 1.7101 (1.9167) / 1.7787(1.7638)  
 St.Dev = .8124 (.6661) / .8082(.8616)

Q A15 A job is usually done more easily when many people are involved.



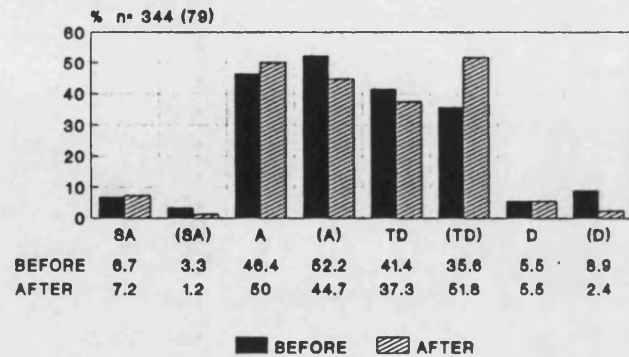
Corr.Co = .3916(.4626) P= .000(P= .000)  
 Mean = 2.3837 (2.1944) / 2.4017(2.3611)  
 St.Dev = .8364 (.8824) / .8043(.8608)

Q A16 I usually find talking to strangers difficult.



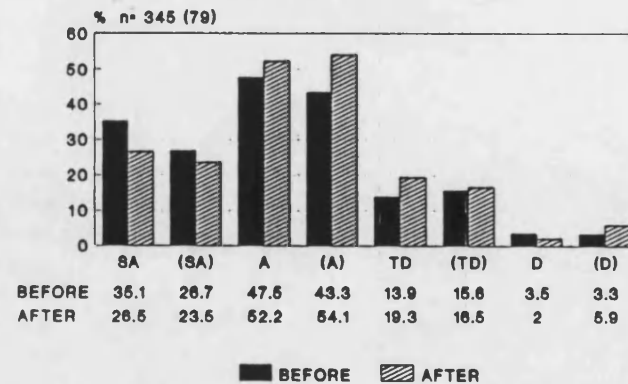
Corr.Co = .4349(.3823) P= .000(P= .001)  
 Mean = 2.5217 (2.4861) / 2.5879(2.5878)  
 St.Dev = .9464 (.8880) / .9558(.7686)

Q A17 I generally find it easy to persuade people to accept my point of view.



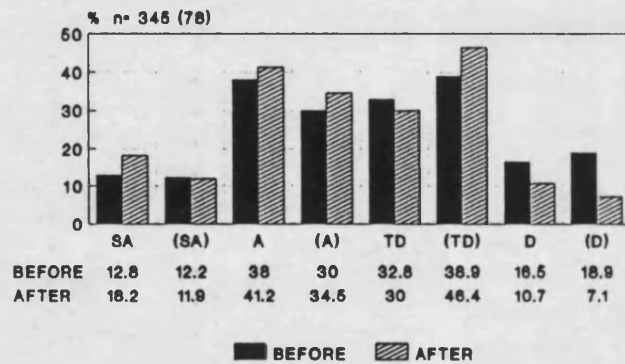
Corr.Co = .3622(.4816) P= .000(P= .000)  
Mean = 2.4680 (2.5000) / 2.4104(2.5529)  
St.Dev = .7022 (.7071) / .7085(.5871)

Q A18 I usually do my best work when I am left alone to get on with the job.



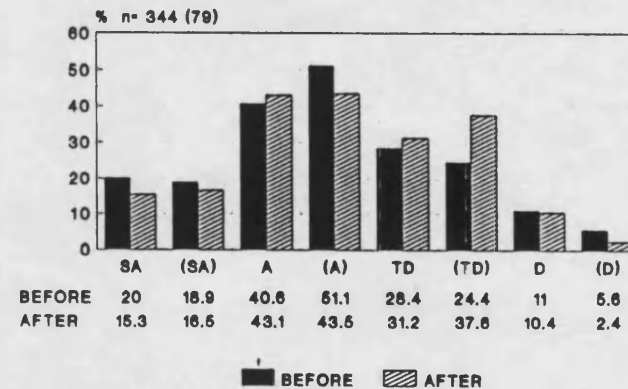
Corr.Co = .4301(.4016) P= .000(P= .000)  
Mean = 1.8580 (2.2889) / 1.9653(2.1059)  
St.Dev = .7814 (1.2201) / .7345(.9639)

Q A19 Giving instructions to people you know is usually more difficult than giving instructions to strangers.



Corr.Co = .1996(.1858) P= .000(P= .103)  
Mean = 2.5304 (2.6444) / 2.3314(2.4881)  
St.Dev = .9149 (.9279) / .8945(.7990)

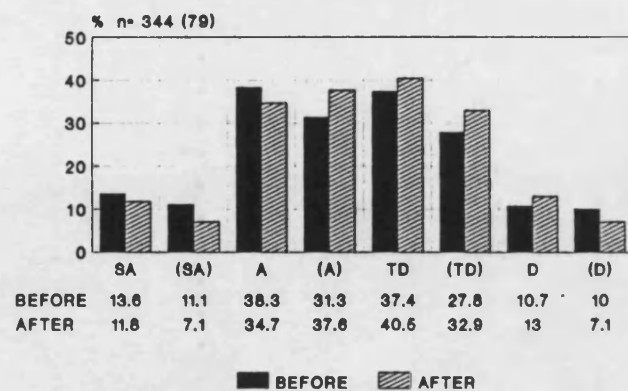
Q A20 I find it difficult to deal with people who are angry



Corr.Co = .2906(.2887) P= .000(P= .010)  
Mean = 2.3043 (2.1887) / 2.3671(2.2688)  
St.Dev = .9135 (.7968) / .8854(.7683)

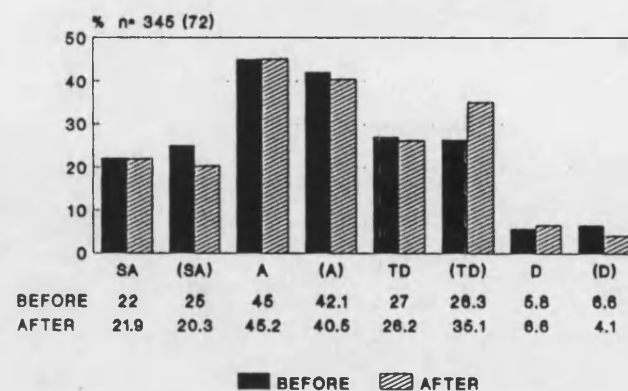


Q A21 I tend to find controlling my  
frustrations difficult.



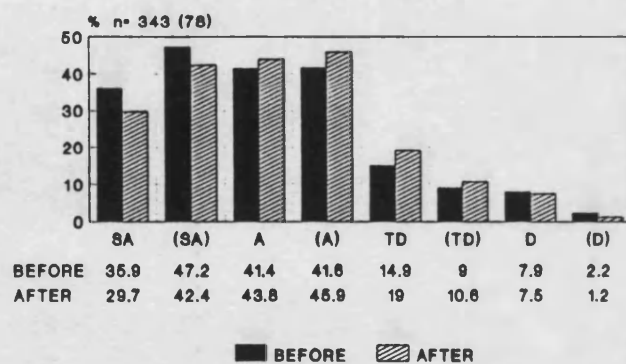
Corr.Co = .3990(.7358) P= .000(P= .000)  
Mean = 2.4522 (3.0556) / 2.5462(2.9529)  
St.Dev = .8584(1.4582) / .8644(1.3532)

Q A22 I'd rather get on with a job than  
spend time talking about it



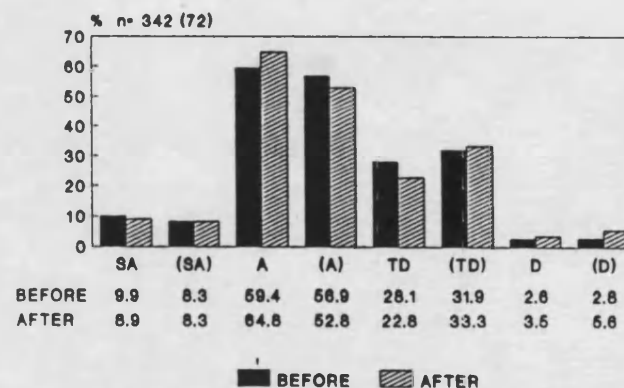
Corr.Co = .3991(.1646) P= .000(P= .167)  
Mean = 2.1652 (2.1447) / 2.1788(2.2297)  
St.Dev = .8346 (.8749) / .8471(.8201)

Q A23 I enjoy making things



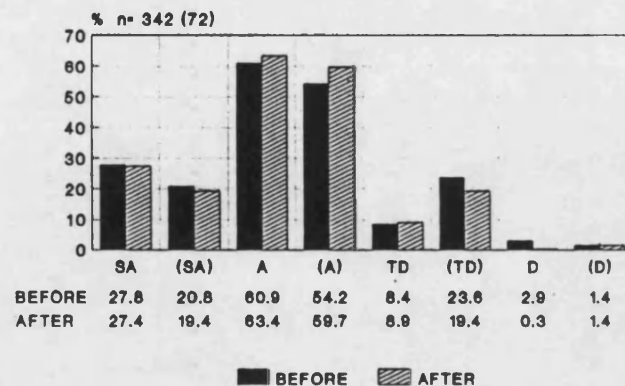
Corr.Co = .6383(.5403) P= .000(P= .000)  
Mean = 1.9475 (1.8629) / 2.0432(1.7059)  
St.Dev = .9065 (.7377) / .8872(.7041)

Q A24 I usually cope well when the  
unexpected happens



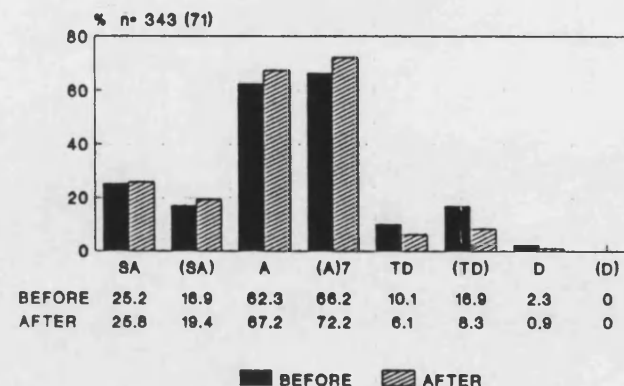
Corr.Co = .3390(.2801) P= .000(P= .017)  
Mean = 2.2339 (2.2817) / 2.2075(2.3611)  
St.Dev = .6572(.6594) / .6430(.7181)

Q A25 I enjoy working with people of the opposite sex.



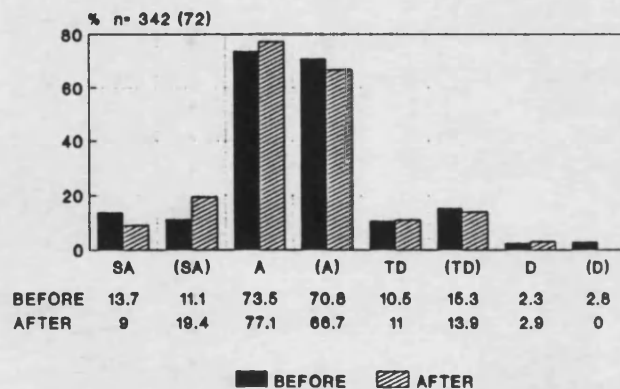
Corr.Co = .4578(.8475) P= .000(P= .000)  
 Mean = 1.8638 (2.0556) / 1.8213(2.0278)  
 St.Dev = .8790(.7099) / .5883(.6708)

Q A26 I prefer to learn new skills by using them in a real work task



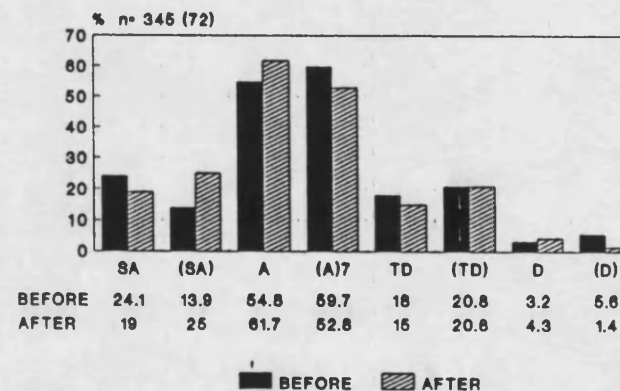
Corr.Co = .2288(.2335) P= .000(P= .050)  
 Mean = 1.8957 (2.0000) / 1.8203(1.8889)  
 St.Dev = .6609(.5856) / .5677(.5168)

Q A27 I am generally popular with other pupils.



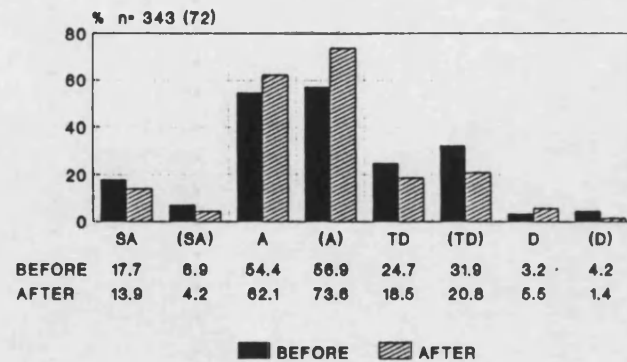
Corr.Co = .4898(.4653) P= .000(P= .000)  
 Mean = 2.0146 (2.0972) / 2.0783(1.9444)  
 St.Dev = .5788(.6088) / .5674(.5767)

Q A28 I usually find it easier to work with out supervision.



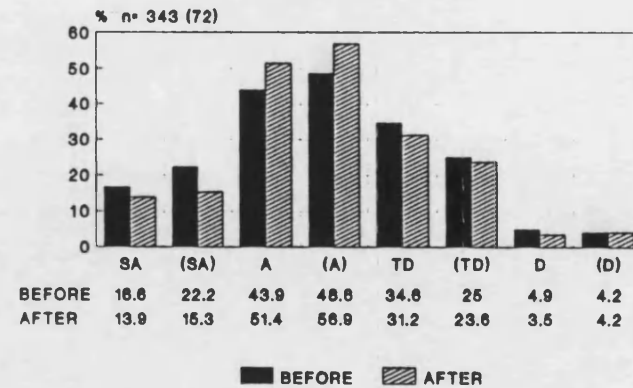
Corr.Co = .3458(.3750) P= .000(P= .001)  
 Mean = 2.0029 (2.1808) / 2.0461(1.9881)  
 St.Dev = .7412(.7378) / .7158(.7218)

Q A29 I find it easy to make myself understood by adults and people my own age.



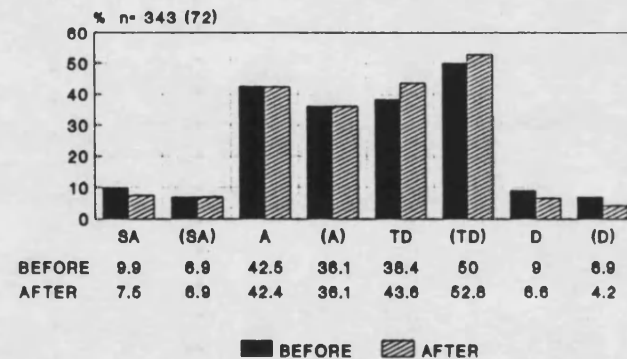
Corr.Co = .3403(.1746) P= .000(P= .143)  
Mean = 2.1337 (2.3333) / 2.1561(2.1844)  
St.Dev = .7321 (.6713) / .7216(.5211)

Q A30 I usually keep working at a problem until I find a solution



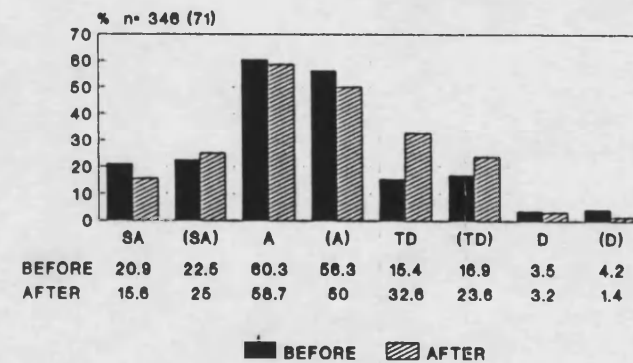
Corr.Co = .3853(.4892) P= .000(P= .000)  
Mean = 2.2781 (2.1111) / 2.2428(2.1667)  
St.Dev = .7956 (.7871) / .7285(.7316)

Q A31 If I see a task that needs doing, I usually tackle it without waiting for instructions from others



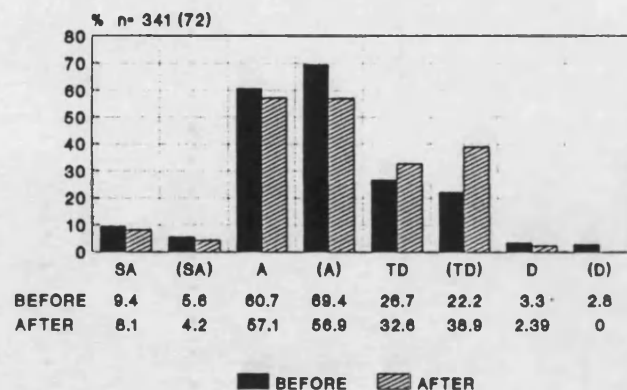
Corr.Co = .3212(.3022) P= .000(P= .010)  
Mean = 2.4651 (2.6694) / 2.4942(2.6417)  
St.Dev = .7928(.7282) / .7313(.6907)

Q A32 I generally like to collect all the relevant information before making decisions about a problem



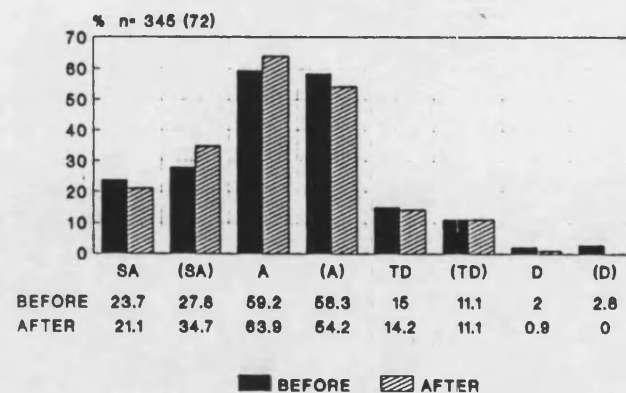
Corr.Co = .3821(.3582) P= .000(P= .002)  
Mean = 2.0145 (2.0262) / 2.1329(2.0139)  
St.Dev = .7090 (.7654) / .7017(.7140)

**Q A33 Working in industry tends to be hard work**



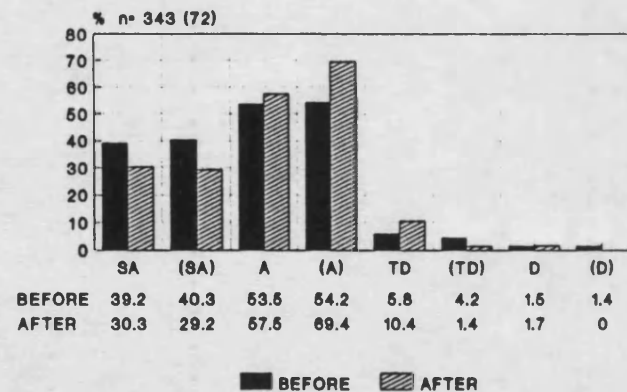
Corr.Co = .2018(.2759) P= .000(P= .019)  
 Mean = 2.2375 (2.2222) / 2.2911(2.3472)  
 St.Dev = .6592 (.6868) / .6442(.6607)

**Q A34 I like to tackle challenging tasks.**



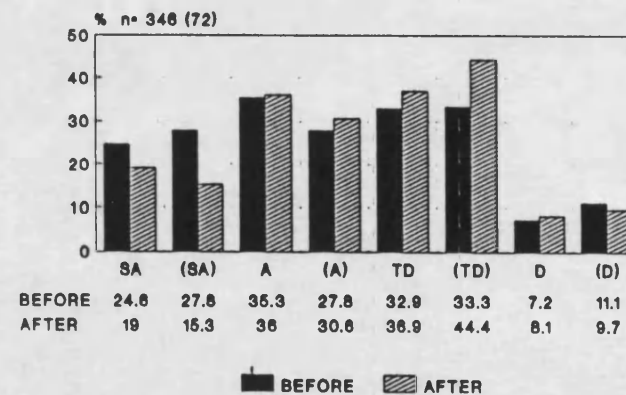
Corr.Co = .4107(.4423) P= .000(P= .000)  
 Mean = 1.9538 (1.8689) / 1.9538(1.7639)  
 St.Dev = .6837 (.6887) / .6887(.6389)

**Q A35 I find talking to people is the best way of finding out about new ideas**



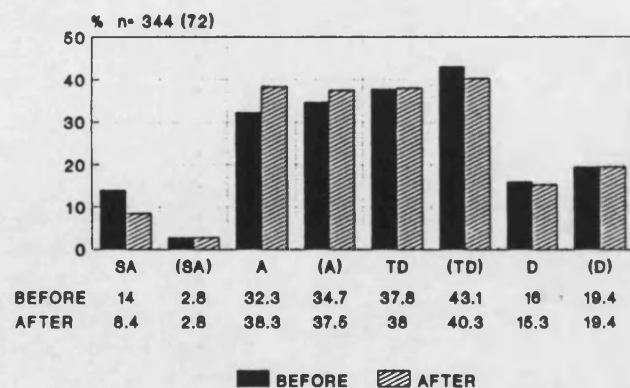
Corr.Co = .2265(.1553) P= .000(P= .193)  
 Mean = 1.6946 (1.6667) / 1.6946(1.7222)  
 St.Dev = .6466 (.6280) / .6452(.4813)

**Q A36 I tend to work better when I have competition at school**



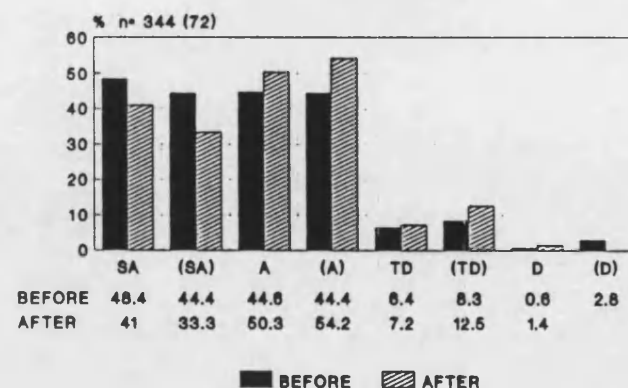
Corr.Co = .4075(.4099) P= .000(P= .000)  
 Mean = 2.2293 (2.2776) / 2.3401(2.4881)  
 St.Dev = .9024 (.9961) / .8766(.8720)

Q A37 I feel that discussing my problems  
with others reveals my weaknesses



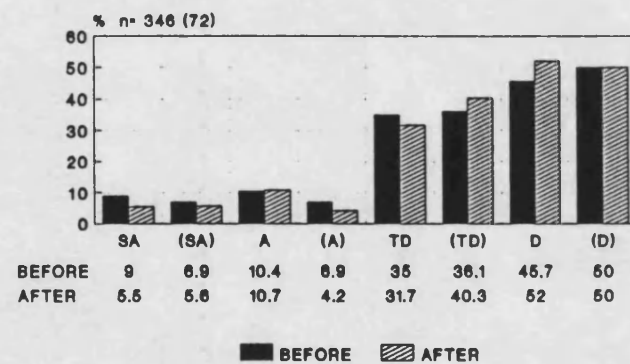
Corr.Co = .3098(.4605) P=.000(P=.000)  
Mean = 2.6581 (2.7917) / 2.6023(2.7839)  
St.Dev = .9206(.7861) / .8461(.7960)

Q A38 It is important to say what you  
think when working with others



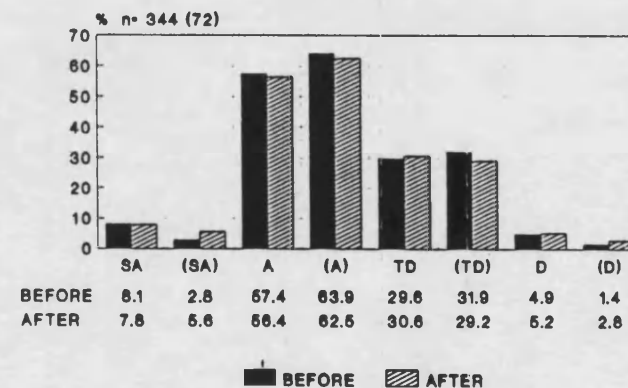
Corr.Co = .2676(.1289) P=.000(P=.280)  
Mean = 1.6913 (1.6944) / 1.6908(1.7917)  
St.Dev = .6366 (.7438) / .6679(.6487)

Q A39 I feel that the person with the  
loudest voice often makes the best  
leader.



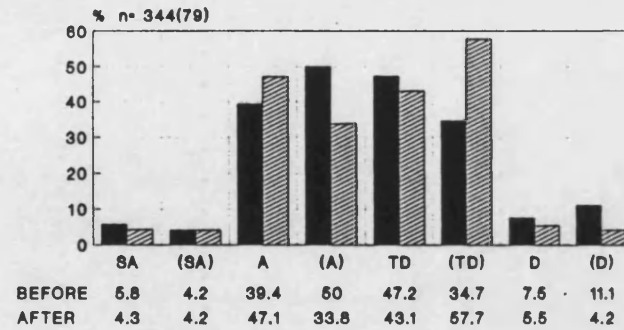
Corr.Co = .3098(.5496) P=.000(P=.000)  
Mean = 3.1734 (3.2917) / 3.3055(3.3472)  
St.Dev = .9442(.6791) / .8696 (.8077)

Q A40 I tend to project a confident  
image to others.



Corr.Co = .3523(.3437) P=.000(P=.003)  
Mean = 2.3130 (2.3194) / 2.3324(2.2917)  
St.Dev = .6909(.5522) / .6953(.6162)

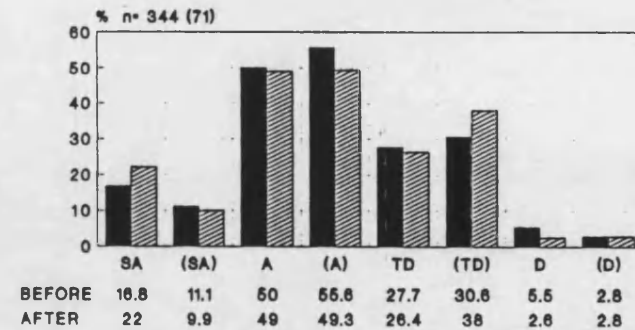
QA41 My first reaction about the quality of an idea tends to be correct



BEFORE AFTER

Corr.Co = .3990(.7368) P= .000(P= .000)  
Mean = 2.1166 (1.9778) / 2.0807(1.9766)  
St.Dev = .6683 (.6177) / .6263(.6971)

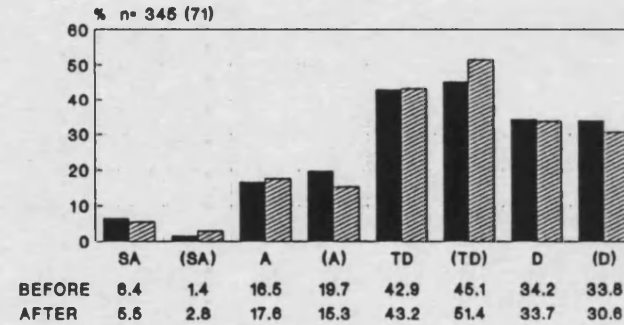
Q A42 I tend to be very self critical of my work at school.



BEFORE AFTER

Corr.Co = .4057(.2946) P= .000(P= .013)  
Mean = 2.2197 (2.2600) / 2.0957(2.3380)  
St.Dev = .7863 (.6869) / .7622(.6969)

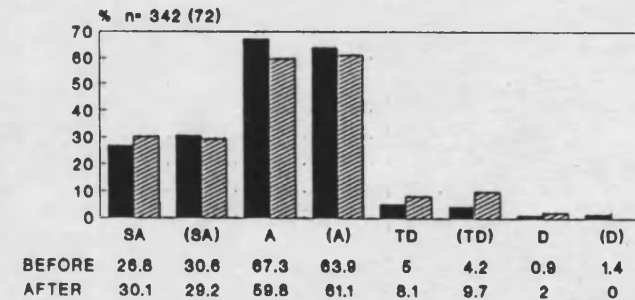
Q A43 I do not like sharing my ideas others



BEFORE AFTER

Corr.Co = .4392(.3492) P= .000(P= .003)  
Mean = 3.0493 (3.1227) / 3.0519(3.0972)  
St.Dev = .8730 (.7662) / .8552(.7636)

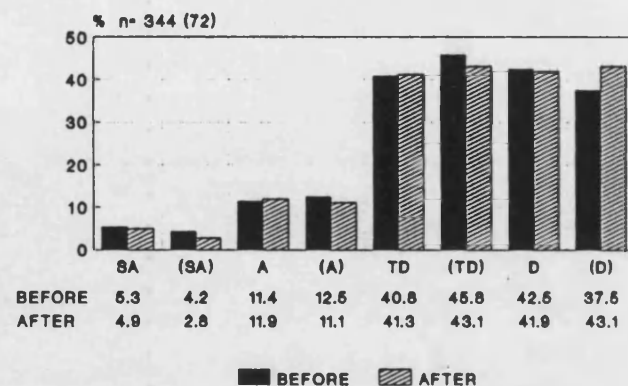
Q A44 When I am given a difficult practical task to do at school, I try to complete it successfully



BEFORE AFTER

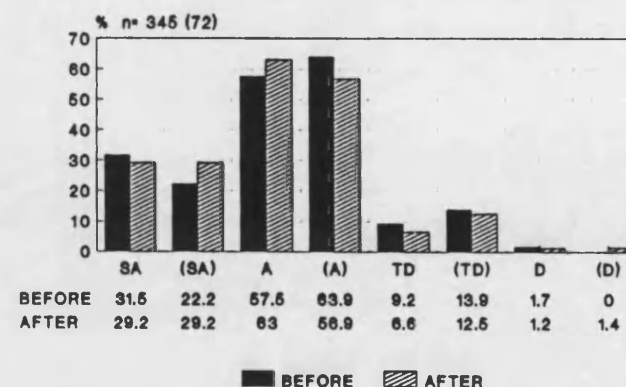
Corr.Co = .2968(.4255) P= .000(P= .000)  
Mean = 1.7988 (1.7639) / 1.8208(1.8056)  
St.Dev = .5597 (.5932) / .6569(.6967)

Q A45 I tend to work better when the boss is male



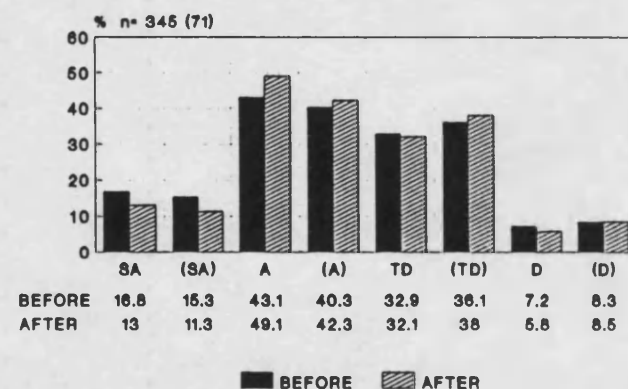
Corr.Co = .2996 (.2010) P= .000(P= .090)  
 Mean = 3.2063 (3.1667) / 3.2006(3.2639)  
 St.Dev = .8430 (.8049) / .8360(.7890)

Q A46 I usually respond well to being given a position of trust



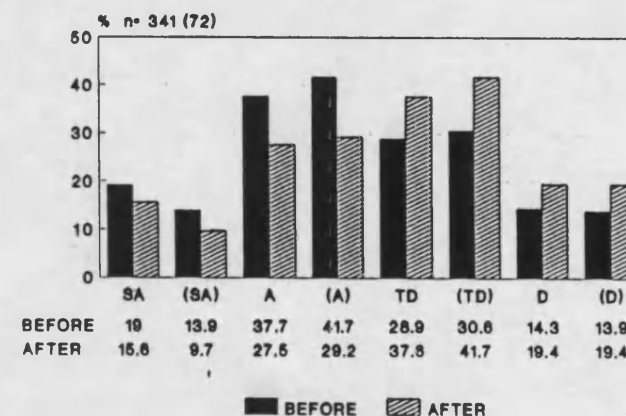
Corr.Co = .3621(.3179) P= .000(P= .007)  
 Mean = 1.8121 (1.9167) / 1.7877(1.8611)  
 St.Dev = .6666 (.5993) / .6039(.6777)

Q A47 I am usually at my best in an emergency



Corr.Co = .4104(.5786) P= .000(P= .000)  
 Mean = 2.3064 (2.3750) / 2.3064(2.4366)  
 St.Dev = .8332(.8466) / .7881(.8069)

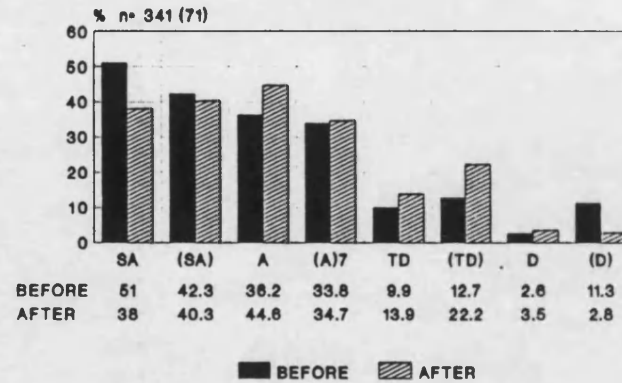
Q A48 Work in office easier than factory



Corr.Co = .3700(.4246) P= .000(P= .000)  
 Mean = 2.3860 (2.4444) / 2.6069(2.7083)  
 St.Dev = .9520(.9021) / .8699(.8950)

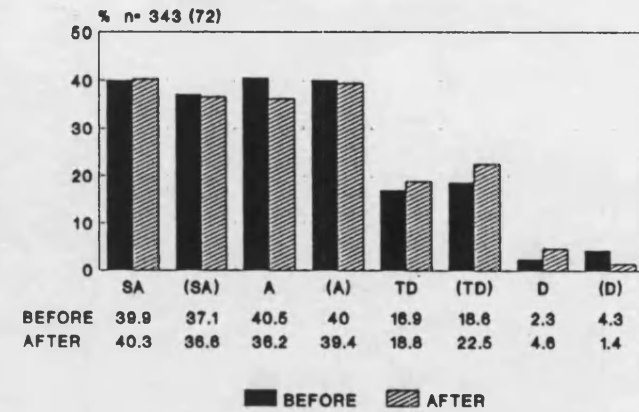


Q A49 I do not mind working hard if I know I am going to make some money



Corr.Co = .3561(.4899) P= .000(P= .000)  
 Mean = 1.6501 (1.9296) / 1.6290(1.8750)  
 St.Dev = .7874(1.0046) / .7941(.8548)

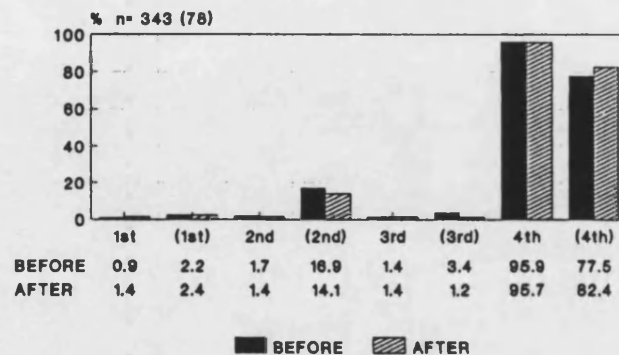
Q A50 I Would Enjoy Working For Myself



Corr.Co = .3853(.4992) P= .000(P= .000)  
 Mean = 2.1156 (1.9778) / 2.0807(1.9765)  
 St.Dev = .5883 (.6177) / .6263(.5971)

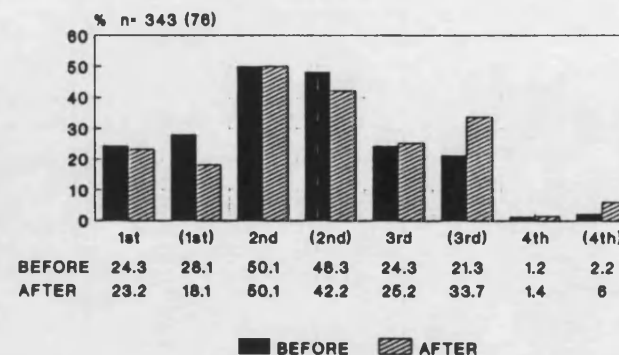


**B1a On discovering theft of company property I would:-  
Sack all the staff**



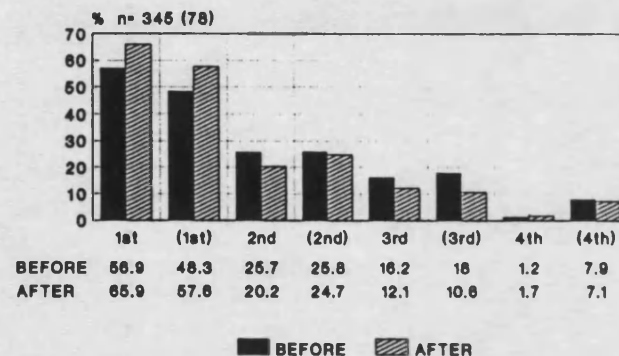
Corr.Co = .0842(.8431) P= .012(P= .000)  
Mean = 3.9246 (3.6618) / 3.9130(3.8363)  
St.Dev = .3984(.8822) / .4426(.8143)

**B1b On discovering theft of company property I would:- Tighten the  
company's security arrangements**



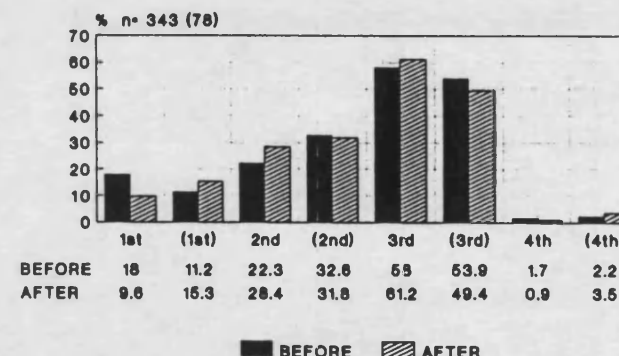
Corr.Co = .2044(.2177) P= .000(P= .069)  
Mean = 2.0232 (1.9776) / 2.0493(2.2771)  
St.Dev = .7310(.7684) / .7366(.8310)

**B1c On discovering theft of company property I would:-  
Discuss the problem with my staff**



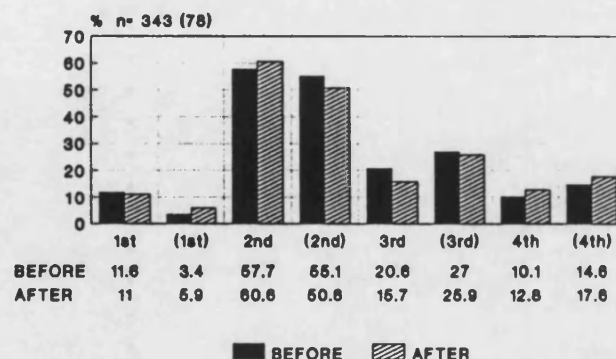
Corr.Co = .2421(.3840) P= .000(P= .001)  
Mean = 1.6156 (1.8639) / 1.4971(1.8706)  
St.Dev = .7847(.9834) / .7737(.9308)

**B1d On discovering theft of company property I would:- Plan a way of  
catching those responsible**



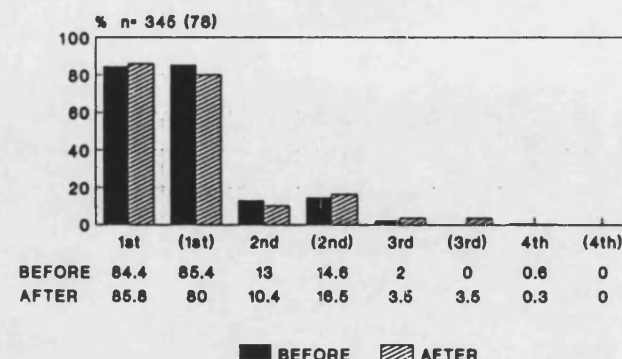
Corr.Co = .2449(.2898) P= .000(P= .010)  
Mean = 2.4348 (2.4719) / 2.6333(2.4118)  
St.Dev = .8011(.7244) / .8774(.7812)

**B2a If staff were consistently late for work I would:-**  
Dismiss them after several warnings



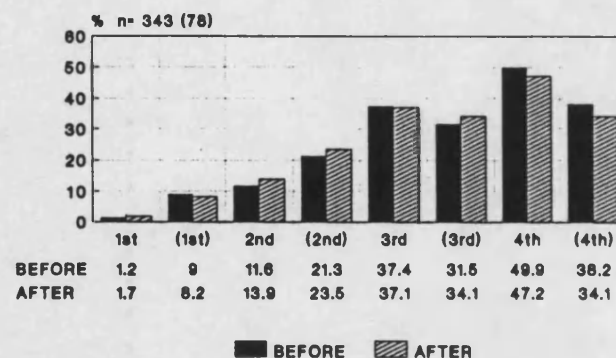
Corr.Co = .2960(.4293) P= .000(P= .000)  
Mean = 2.2928 (2.5281) / 2.3014(2.5529)  
St.Dev = .8023(.7847) / .8294(.8523)

**B2b If staff were consistently late for work I would:-** Discuss the cause of the problem with them



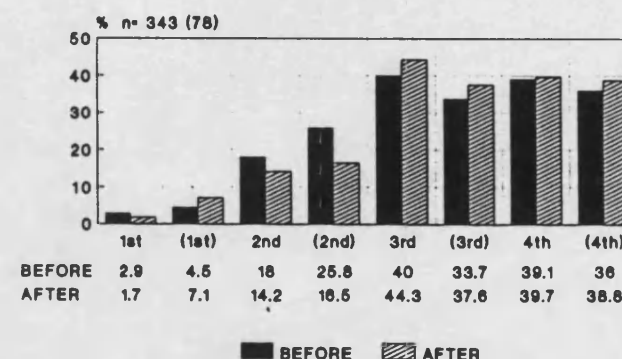
Corr.Co = .1042(.3401) P= .053(P= .002)  
Mean = 1.1879 (1.1481) / 1.1821(1.2353)  
St.Dev = .4779(.3652) / .4861(.5036)

**B2c If staff were consistently late for work I would:-**  
Arrange for employees to start later



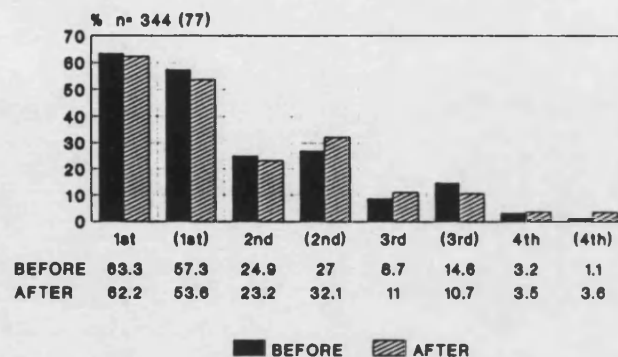
Corr.Co = .2770(.5696) P= .000(P= .000)  
Mean = 3.3594 (2.9888) / 3.2986(2.9412)  
St.Dev = .7302(.8827) / .7708(.8566)

**B2d If staff were consistently late for work I would:-** Ignore the problem and hope things would improve in time



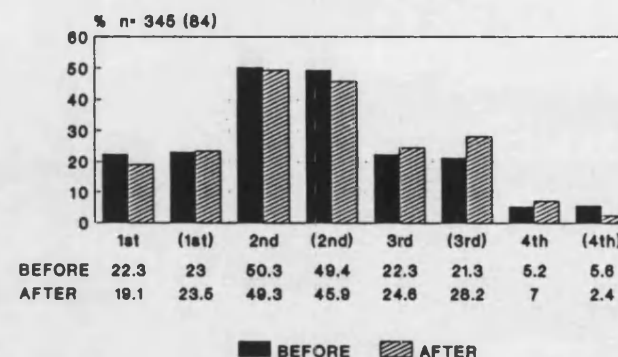
Corr.Co = .2651(.4009) P= .000(P= .000)  
Mean = 3.1636 (3.0112) / 3.2203(3.0824)  
St.Dev = .8168(.8982) / .7486(.8168)

**B3a I would Like to Run My Own Company  
If I Had a Brilliant Idea for a Product  
or Service**



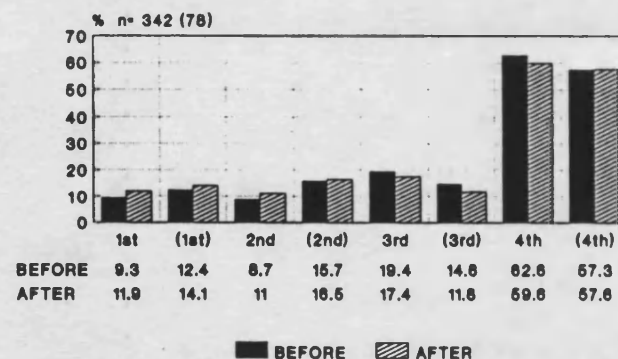
Corr.Co = .3628(.3420) P= .000(P= .002)  
Mean = 1.5173 (1.5955) / 1.5565(1.6429)  
St.Dev = .7646 (.7793) / .8233(.8188)

**B3b I Would Like to Run My Own Company  
If I Had a Partner Who Knew What They  
Were Doing**



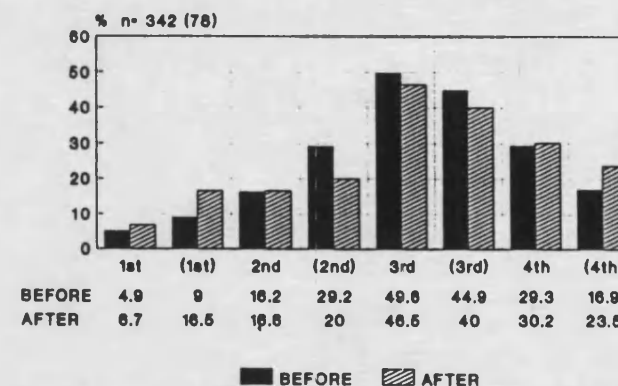
Corr.Co = .2290(.2956) P= .000(P= .009)  
Mean = 2.1072 (2.0899) / 2.1942(2.0941)  
St.Dev = .6016 (.6206) / .6247(.7811)

**B3c I Would Like to Run My Own Company  
If I Had So Much Money It Didn't Matter  
If the Business Failed**



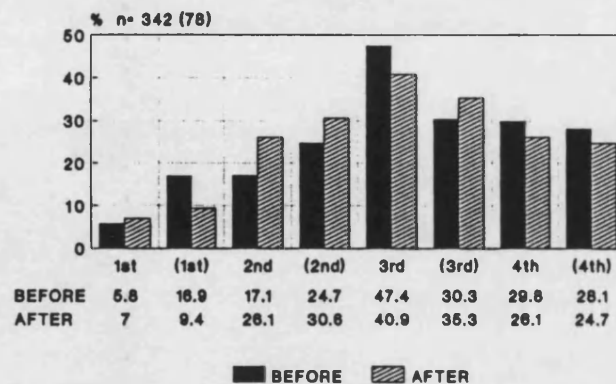
Corr.Co = .3926(.6203) P= .000(P= .000)  
Mean = 3.3536 (3.1665) / 3.2471(2.0941)  
St.Dev = .8807 (1.100) / 1.0605(.7811)

**B3d I Would Run My Own Company If:-  
If I Couldn't Get a Job With a Large Co.**



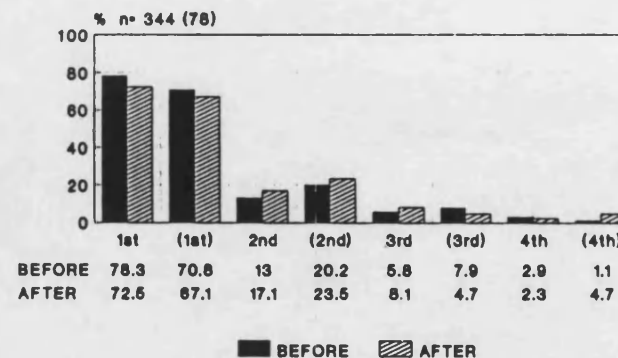
Corr.Co = .2422(.2394) P= .000(P= .036)  
Mean = 3.0319 (2.6866) / 3.0029(2.7059)  
St.Dev = .8081 (.8993) / .8568(.9413)

**B4a The key to successful selling is:-  
Spending a lot of money on advertising**



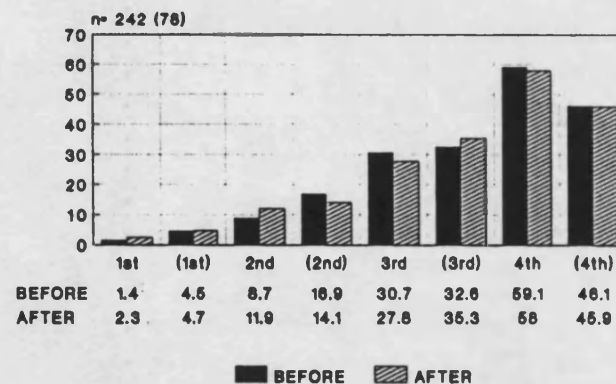
Corr.Co = .3732(.4901) P= .000(P= .000)  
Mean = 3.0116 (2.6966) / 2.6909(2.7629)  
St.Dev = .8374 (1.0596) / .8848(.9374)

**B4b The key to successful selling is:-  
Carefully planning how best to sell your  
product or services**



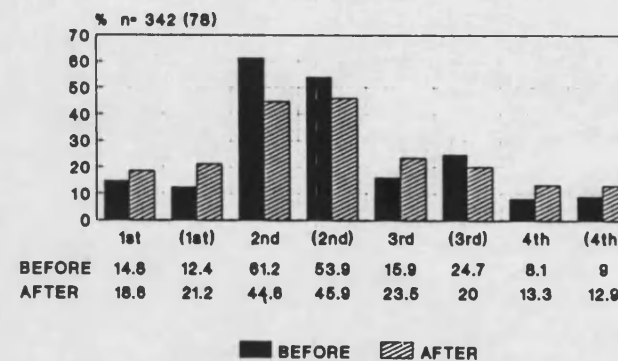
Corr.Co = .2336(.4144) P= .000(P= .000)  
Mean = 1.3333 (1.3933) / 1.4017(1.4706)  
St.Dev = .7166 (.6646) / .7366(.7888)

**B4c The key to successful selling is:-  
Giving high bonuses to sales staff**



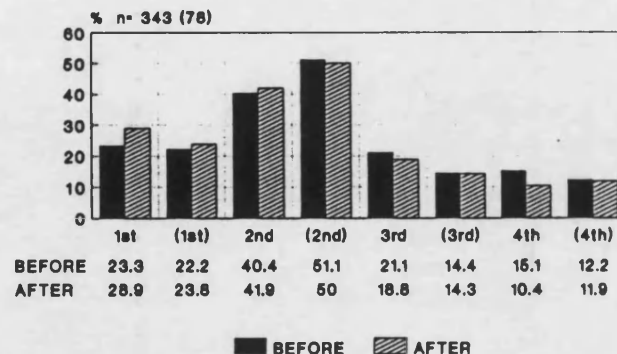
Corr.Co = .2733(.3859) P= .000(P= .000)  
Mean = 3.4764 (3.2022) / 3.4145(3.2236)  
St.Dev = .7164 (.6814) / .7882(.8643)

**B4d The key to successful selling is:-  
Charging less for your product or  
services than your competitors**



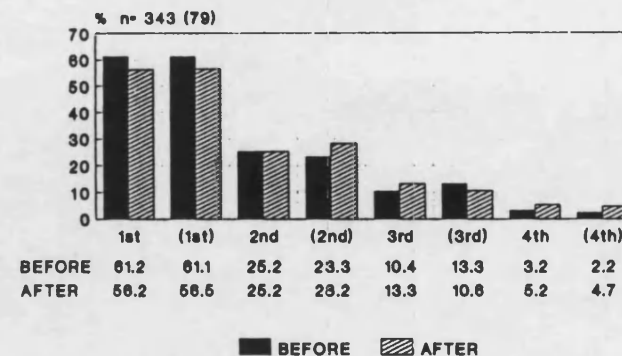
Corr.Co = .2361(.2616) P= .000(P= .026)  
Mean = 2.1739 (3.2022) / 2.3169(2.2471)  
St.Dev = .7768 (.8036) / .9264(.9374)

**B5a Some companies encourage their employee to work as a team because:- It Overcomes the individual's weaknesses**



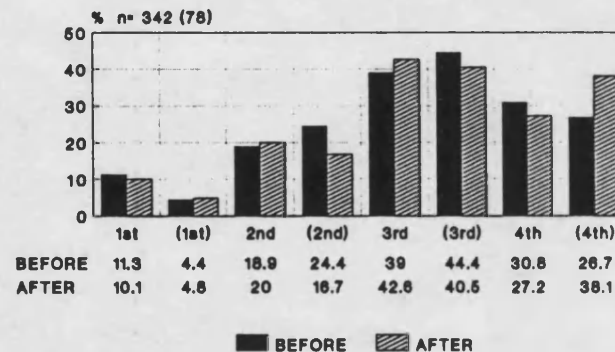
Corr.Co = .2329(.4804) P= .000(P= .000)  
 Mean = 2.2820 (2.1667) / 2.1069(2.1429)  
 St.Dev = .9863 (.9194) / .9403(.9202)

**B5b Some companies encourage their employee to work as a team because:- It produces more useful Ideas in the co.**



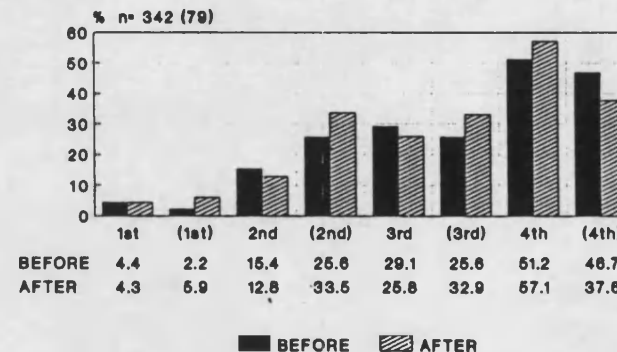
Corr.Co = .2029(.4843) P= .000(P= .000)  
 Mean = 1.5665 (1.5667) / 1.6754(1.6363)  
 St.Dev = .8064 (.8080) / .8861(.8670)

**B5c Some companies encourage their employee to work as a team because:- It prevents unhealthy competition**



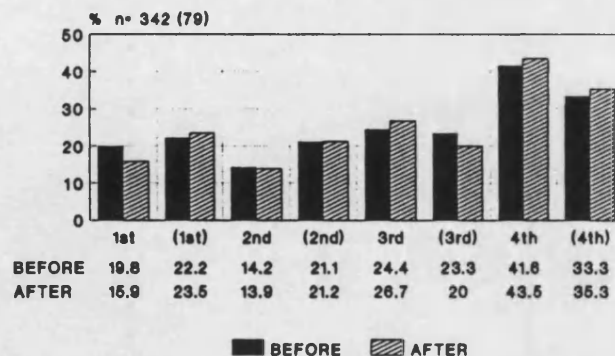
Corr.Co = .1818(.4573) P= .001(P= .000)  
 Mean = 2.8924 (2.9333) / 2.8696(3.1190)  
 St.Dev = .9704 (.8319) / .9294(.8669)

**B5d Some companies encourage their employee to work as a team because:- The boss has more control over the worker**



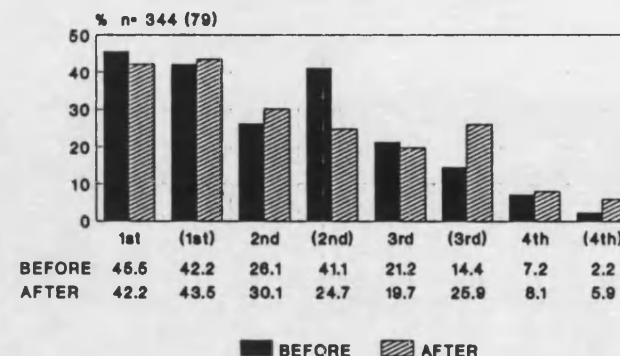
Corr.Co = .3217(.2497) P= .000(P= .026)  
 Mean = 3.2703 (3.1667) / 3.3666(3.0236)  
 St.Dev = .8771 (.8900) / .8846(.9266)

**B6a It is important for senior employees  
to discuss the running of the company:-  
It's difficult for a person to run alone**



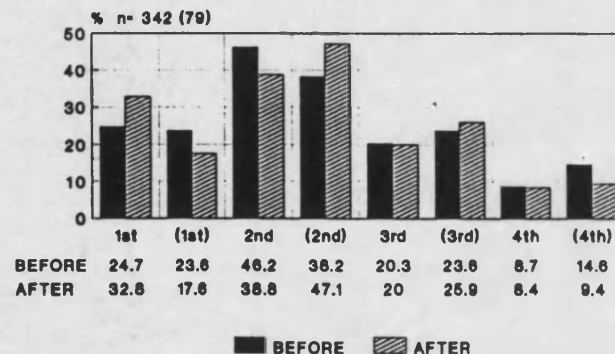
Corr.Co = .2373(.2917) P= .000(P= .009)  
Mean = 2.8779 (2.8778) / 2.9768(2.8706)  
St.Dev = 1.1566(1.1595) / 1.1021(1.1891)

**B6b It is important for senior employees  
to discuss the running of the company:-  
Because it's important to share ideas**



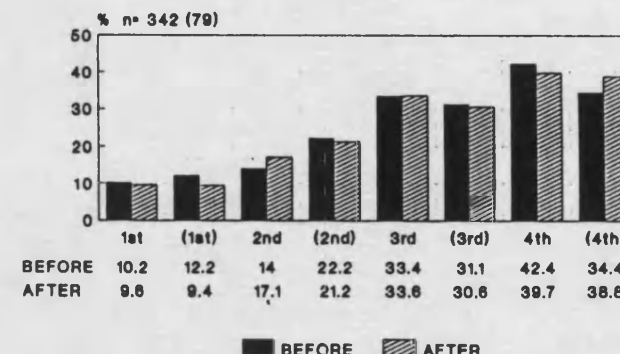
Corr.Co = .2309(.2713) P= .000(P= .016)  
Mean = 1.9014 (1.7667) / 1.9364(1.9412)  
St.Dev = .9745(.7797) / .9700(.9680)

**B6c It is important for senior employees  
to discuss the running of the company:-  
Problems can be identified quickly**



Corr.Co = .2498(.2727) P= .000(P= .016)  
Mean = 2.1308 (2.2921) / 2.0406(2.2706)  
St.Dev = .8858(.9809) / .9299(.8545)

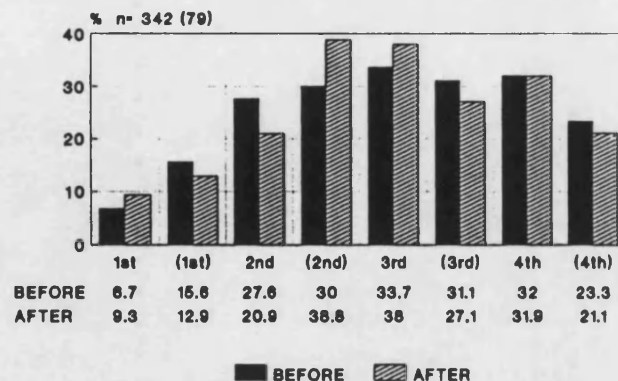
**B6d It is important for senior employees  
to discuss the running of the company:-  
As it's a democratic way to make decis's**



Corr.Co = .2564(.2325) P= .000(P= .039)  
Mean = 3.0814 (2.8778) / 3.0348(2.9882)  
St.Dev = .9834(1.0258) / .9758(.9940)

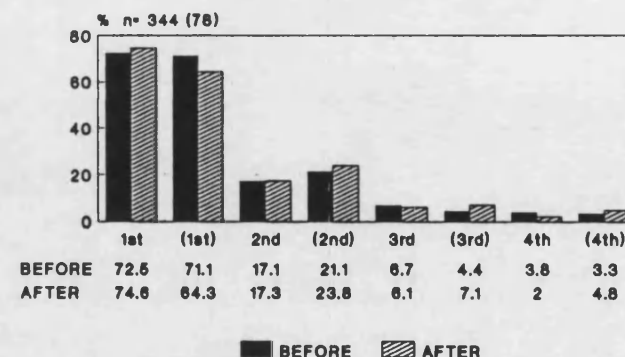


**B7a The best way of producing new ideas**  
is:- To hold a competition



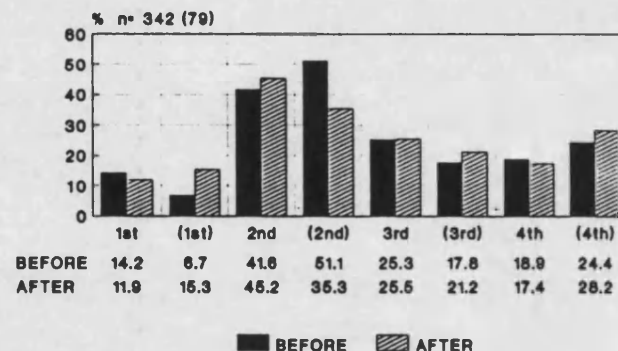
Corr.Co = .3732(.2089) P= .000(P= .066)  
Mean = 2.9099 (2.6222) / 2.9246(2.6674)  
St.Dev = .9261 (1.0120) / .9483(.9691)

**B7b The best way of producing new ideas**  
is:- To have a session where everybody  
contributes their ideas.



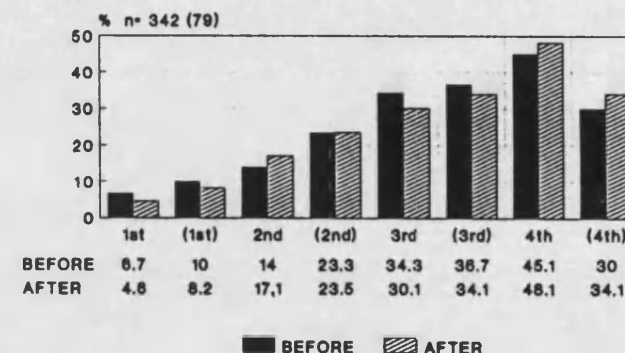
Corr.Co = .2336(.2350) P= .000(P= .038)  
Mean = 1.4174 (1.4000) / 1.3666(1.6238)  
St.Dev = .7774 (.7313) / .8879(.8284)

**B7c The best way of producing new Ideas**  
is:- To look at what your competitors  
are doing.



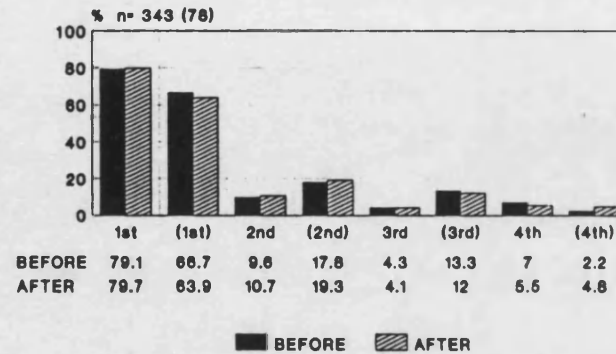
Corr.Co = .2733(.2658) P= .000(P= .023)  
Mean = 2.4884 (2.6000) / 2.4841(2.6236)  
St.Dev = .9667 (.9338) / .9162(1.0667)

**B7d The best way of producing new ideas**  
is:- To pay your employees a bonus for  
every idea which is used by the company



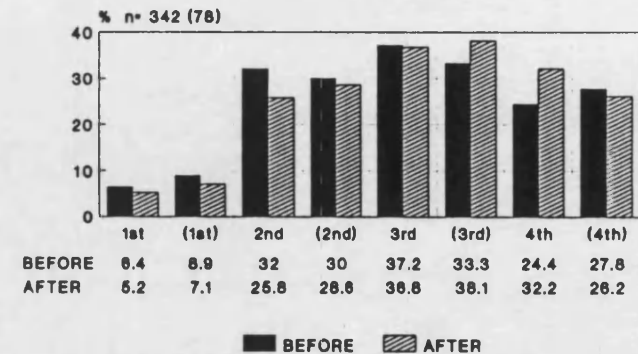
Corr.Co = .2381(.4748) P= .000(P= .000)  
Mean = 3.1773 (2.8667) / 3.2174(2.9412)  
St.Dev = .9102 (.9622) / .8903(.9556)

**B8a The best way of ensuring a  
successfull product or service is:-  
To seek opinions before production.**



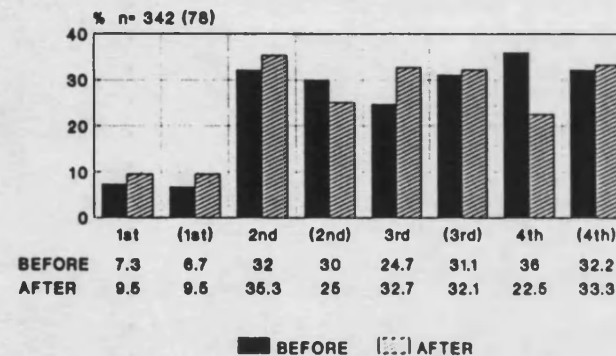
Corr.Co = .2305(.3998) P= .000(P= .000)  
Mean = 1.3913 (1.6111) / 1.3638(1.6783)  
St.Dev = .8630 (.8107) / .8013(.8861)

**B8b The best way of ensuring a  
successfull product or service is:-  
To make sure that it is cheap**



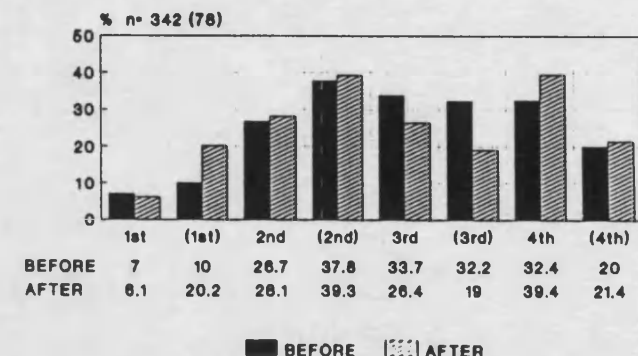
Corr.Co = .1677(.4418) P= .003(P= .000)  
Mean = 2.7966 (2.8000) / 2.9694(2.8333)  
St.Dev = .8836 (.9606) / .8883(.9029)

**B8c The best way of ensuring a  
successfull product or service is:-  
To ensure there are no competitors**



Corr.Co = .2838(.3788) P= .000(P= .001)  
Mean = 2.6953 (2.6869) / 2.6821(2.6928)  
St.Dev = .9812 (.9416) / .9279(.9020)

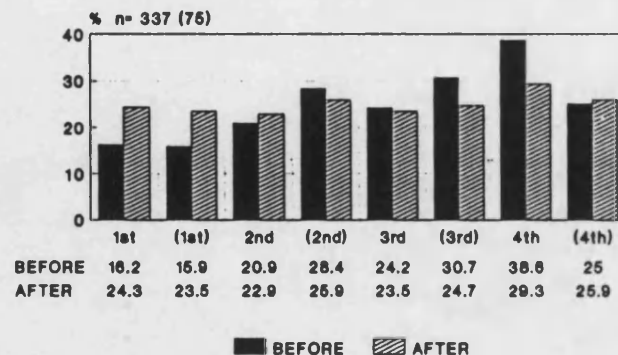
**B8d The best way of ensuring a  
successfull product or service is:-  
To advertise well on television**



Corr.Co = .2886(.4080) P= .000(P= .000)  
Mean = 2.9186 (2.6222) / 2.9913(2.4167)  
St.Dev = .9317 (.9169) / .9699(1.0437)

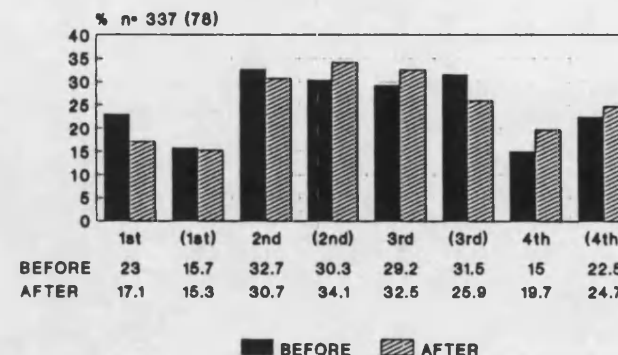


**B9a Better products are made on a production line because:-**  
All products are of similar quality



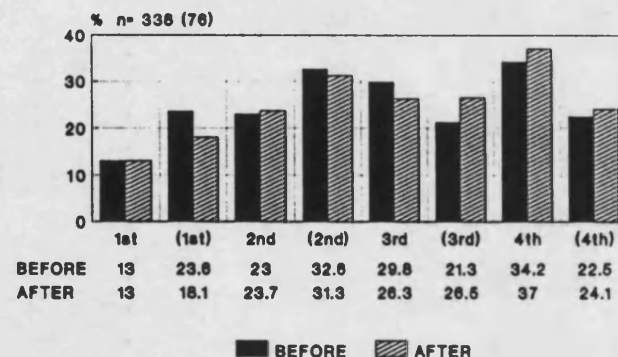
Corr.Co = .2634(.2932) P= .000(P= .011)  
Mean = 2.8525 (2.6477) / 2.5788(2.5309)  
St.Dev = 1.1076(1.0288) / 1.1491(1.1190)

**B9b Better products are made on a production line because:-** It cuts the cost of production



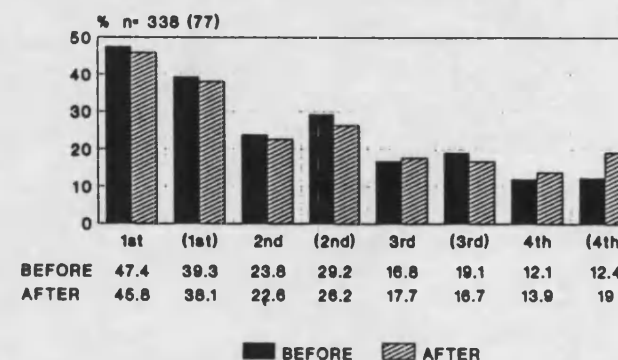
Corr.Co = .2040(.3211) P= .000(P= .004)  
Mean = 2.3628 (2.6067) / 2.5476(2.6000)  
St.Dev = .9976(1.0070) / .9934(1.0269)

**B9c Better products are made on a production line because:-**The average worker could not learn to do everything



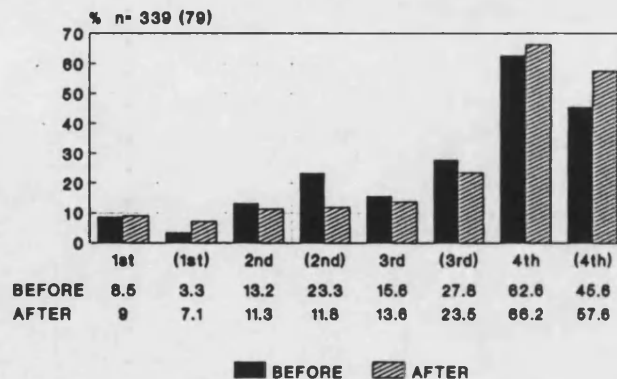
Corr.Co = -.1670(.5143) P= .004(P= .000)  
Mean = 2.8626 (2.4270) / 2.8728(2.6663)  
St.Dev = 1.0366(1.0869) / 1.0566(1.0499)

**B9d Better products are made on a production line because:-** They can be produced more quickly than by one person



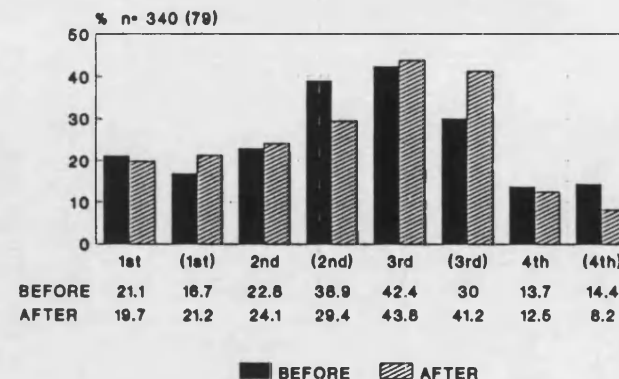
Corr.Co = .2162(.3448) P= .000(P= .002)  
Mean = 1.9363 (2.0449) / 1.9971(2.1667)  
St.Dev = 1.0695(1.0435) / 1.0931(1.1389)

**B10a A company needs profits to:-  
Make money for the owner(s)**



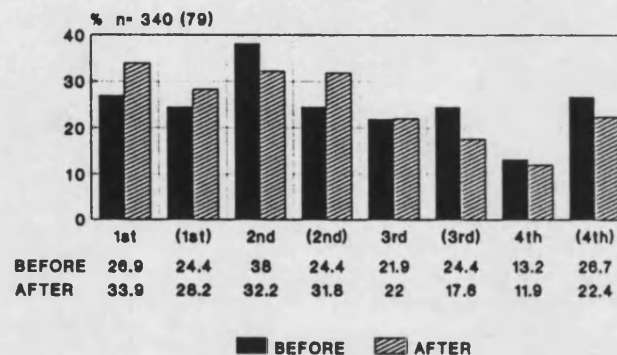
Corr.Co = .4775(.3602) P= .000(P= .002)  
Mean = 3.3235 (3.1656) / 3.3699(3.3176)  
St.Dev = .9991 (.8983) / .9995(.9413)

**B10b A company needs profits to:-  
Ensure the workforce keep their jobs**



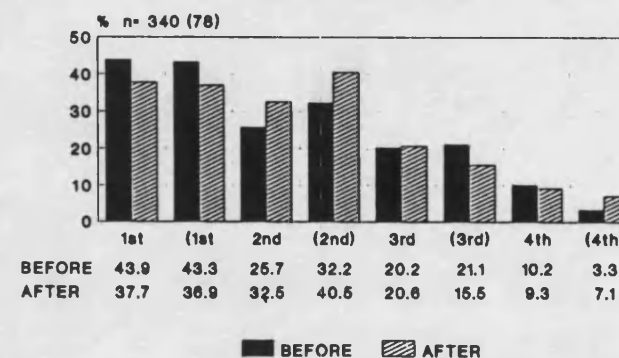
Corr.Co = .2166(.3799) P= .000(P= .001)  
Mean = 2.4683 (2.4222) / 2.4899(2.3647)  
St.Dev = .9739 (.9359) / .9466(.9109)

**B10c A company needs profits to:-  
Enable the company to survive during  
bad times**



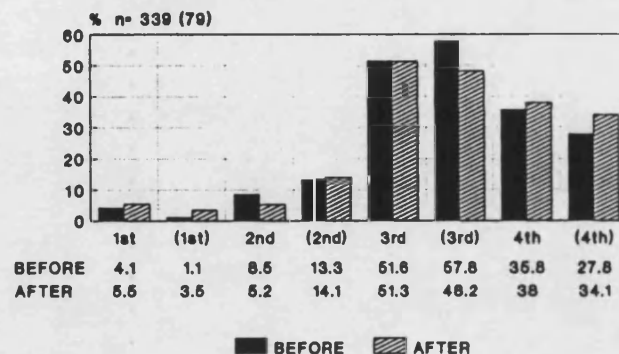
Corr.Co = .2777(.4086) P= .000(P= .000)  
Mean = 2.2135 (2.5333) / 2.1166(2.3412)  
St.Dev = .9669 (1.1336) / 1.0117(1.1166)

**B10d A company needs profits to:-  
Enable it to invest in new ideas for  
the future**



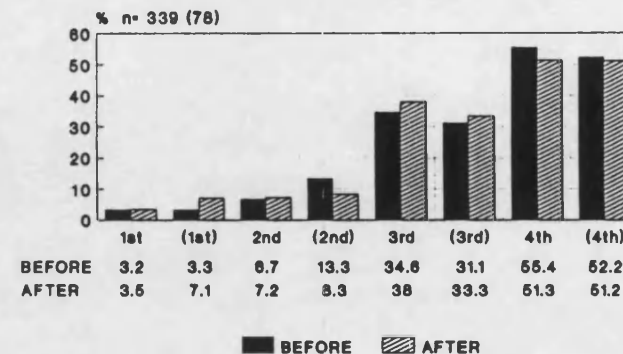
Corr.Co = .2334(.3210) P= .000(P= .004)  
Mean = 1.9678 (1.8444) / 2.0146(1.9266)  
St.Dev = 1.0255 (.8730) / .9778(.9023)

**B11a If a company has so many orders that it can't supply on time it should:-  
Refuse to return customers phone calls**



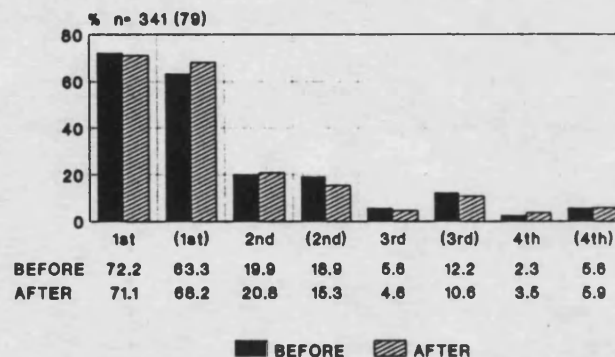
Corr.Co = .1602(.2003) P= .008(P= .077)  
Mean = 3.1906 (3.1222) / 3.2174(3.1294)  
St.Dev = .7666 (.6676) / .7769(.7836)

**B11b If a company has so many orders that it can't supply on time it should:-  
Sack the sales manager**



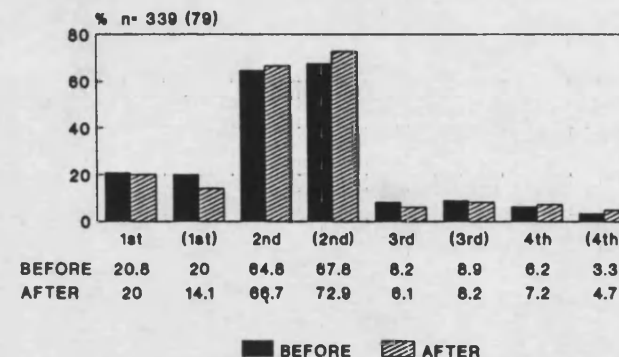
Corr.Co = .1360(.5686) P= .012(P= .000)  
Mean = 3.4223 (3.3222) / 3.3710(3.2867)  
St.Dev = .7677 (.6323) / .7673(.6994)

**B11c If a company has so many orders that it can't supply on time it should:-  
Tell customers and hope they understand**



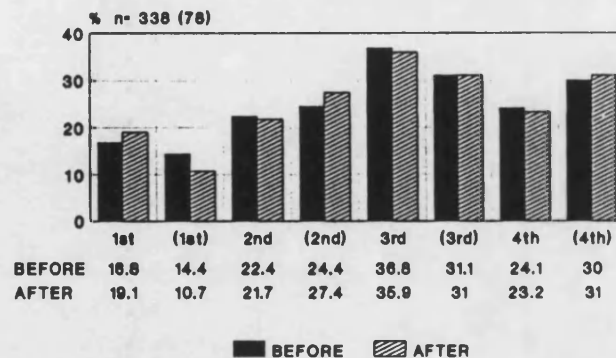
Corr.Co = .1644(.5441) P= .002(P= .000)  
Mean = 1.3801 (1.6000) / 1.4046(1.5412)  
St.Dev = .8989 (.8094) / .7369(.8070)

**B11d If a company has so many orders that it can't supply on time it should:-  
Speed up production to finish the order**



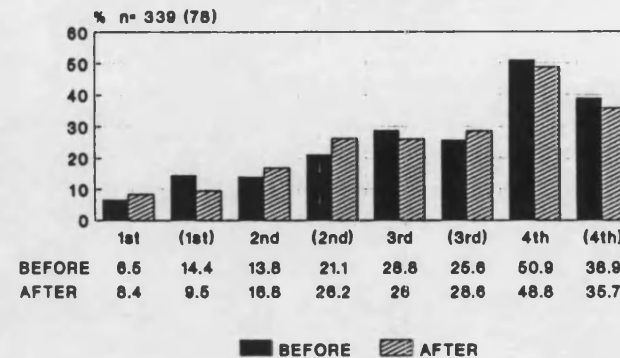
Corr.Co = .0944(.2708) P= .083(P= .016)  
Mean = 1.9971 (1.9556) / 2.0058(2.0632)  
St.Dev = .7336 (.6619) / .7432(.8446)

**B12a The best way to ensure the Company has no union problems is to:- Persuade workers to sign a no strike agreement**



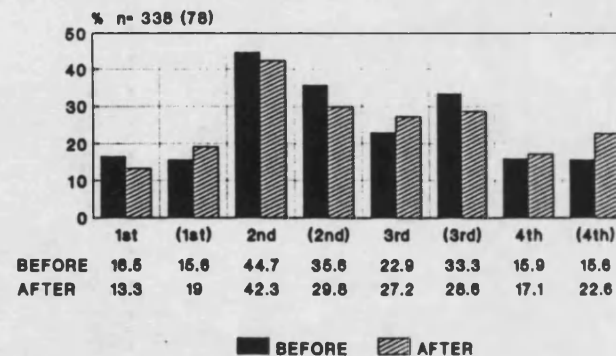
Corr.Co = .2029(.2097) P=.000(P=.086)  
 Mean = 2.6824 (2.7667) / 2.6319(2.8214)  
 St.Dev = 1.0186(1.0391) / 1.0402(.9969)

**B12b The best way to ensure the Company has no union problems is to:- Ban trade unions from operating in the company**



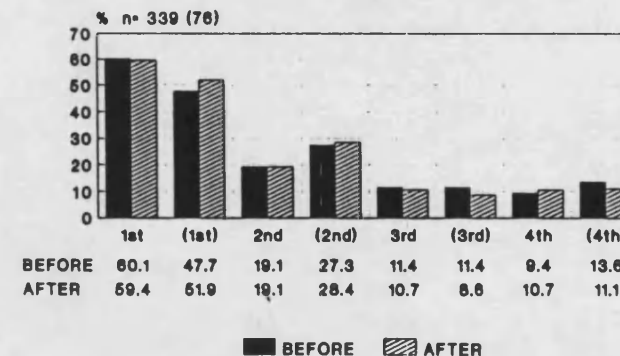
Corr.Co = .2549(.3692) P=.000(P=.001)  
 Mean = 3.2412 (2.8889) / 3.1532(2.9048)  
 St.Dev = .9221(1.0866) / .9852(1.0014)

**B12c The best way to ensure the Company has no union problems is to:- Pay the work force well**



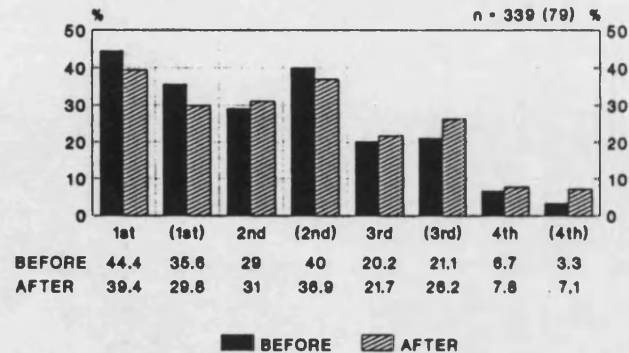
Corr.Co = .2831(.4321) P=.000(P=.000)  
 Mean = 2.3824(2.4889) / 2.4821(2.5476)  
 St.Dev = .8412(.8391) / .9278(1.0480)

**B12d The best way to ensure the Company has no union problems is to:- enable employees to voice their concerns**



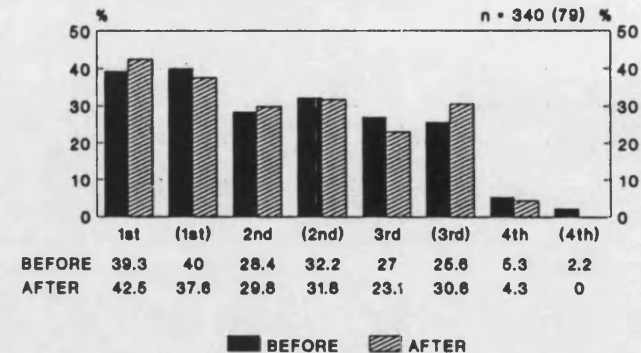
Corr.Co = .3307(.2437) P=.000(P=.034)  
 Mean = 1.0682(1.9091) / 1.7276(1.7901)  
 St.Dev = 1.0022(1.0682) / 1.0292(1.0089)

B13a. The best way of raising money to start a business is to:- get a loan from a bank.



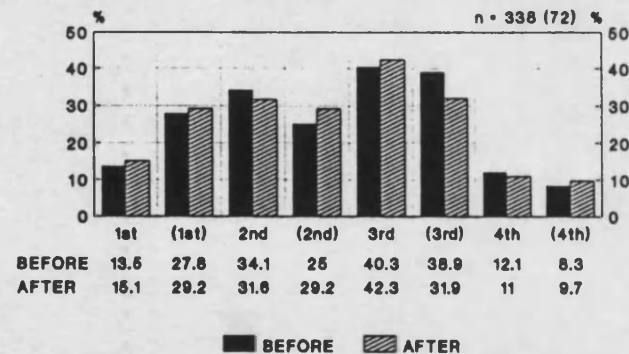
Corr.Co = .3167(.3648) P= .000 (P= .000)  
 Mean = 1.8974 (1.9222) / 1.9797 (2.1071)  
 St.Dev = .9509 (.8377) / .9628 (.9186)

B13b. The best way of raising money to start a business is to:- Share the start up costs equally with others



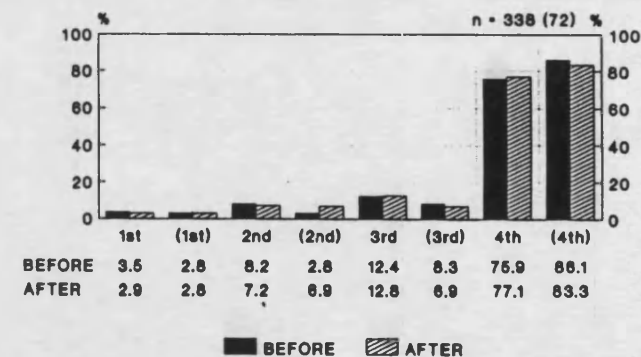
Corr.Co = .2786(.6616) P= .000 (P= .000)  
 Mean = 1.9624 (1.9000) / 1.9017 (1.9294)  
 St.Dev = .9360 (.8618) / .9210 (.8279)

B13c. The best way of raising money to start a business is to:- Get a grant from the Government or Local Authority



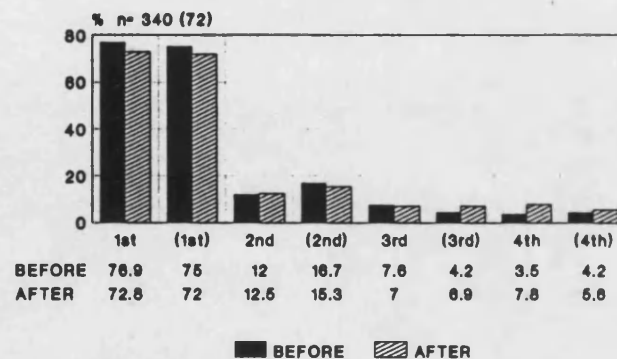
Corr.Co = .3479(.5421) P= .000 (P= .000)  
 Mean = 2.6088 (2.2778) / 2.4928 (2.2222)  
 St.Dev = .8740 (.9674) / .8797 (.9618)

B13d. The best way of raising money to start a business is to:- Sell some of your possessions to raise startup capital



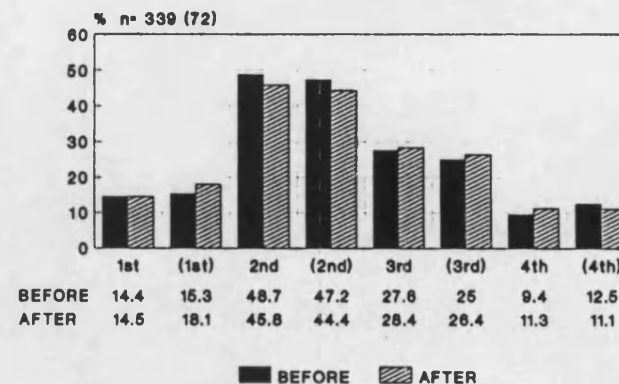
Corr.Co = .1497(.1956) P= .006 (P= .100)  
 Mean = 3.9059 (3.7778) / 3.8406 (3.7083)  
 St.Dev = .7866 (.8330) / .7421 (.7207)

**B14a Advertising is a way of:-  
Informing the company about the  
company's products**



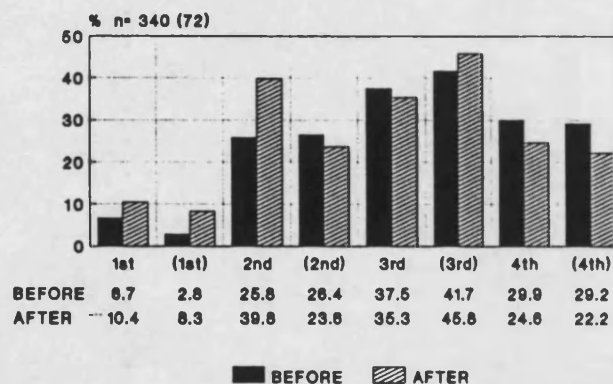
Corr.Co = .1564(.1656) P= .004(P= .164)  
Mean = 1.3772 (1.3750) / 1.4986(1.4583)  
St.Dev = .7741 (.7598) / .9280(.8548)

**B14b Advertising is a way of:-  
Increasing sales**



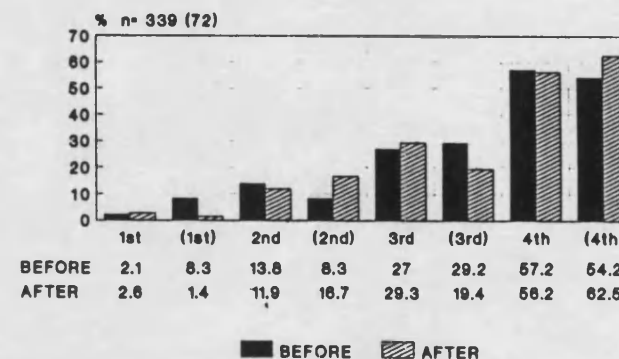
Corr.Co = .1075(.2881) P= .000(P= .014)  
Mean = 2.3196 (2.3472) / 2.3062(2.3056)  
St.Dev = .6334 (.6906) / .6660(.6982)

**B14c Advertising is a way of:-  
Improving the company's image**



Corr.Co = .2438(.2860) P= .000(P= .016)  
Mean = 2.9062 (2.9722) / 2.7399(2.6194)  
St.Dev = .9059 (.8218) / .9458(.8774)

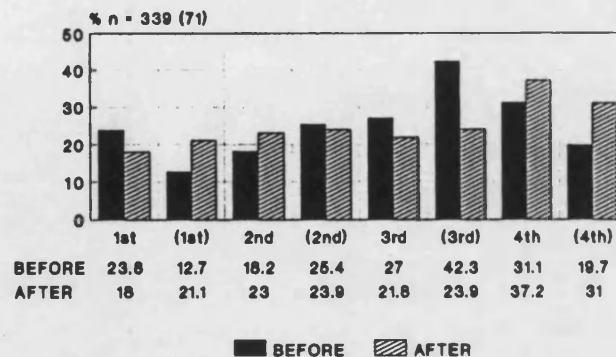
**B14d Advertising is a way of:-  
Ensure the company does not lose sales  
to a competitor**



Corr.Co = .2301(.2002) P= .000(P= .092)  
Mean = 3.3830 (3.2817) / 3.3813(3.4306)  
St.Dev = .7996 (.9410) / .7421(.8192)

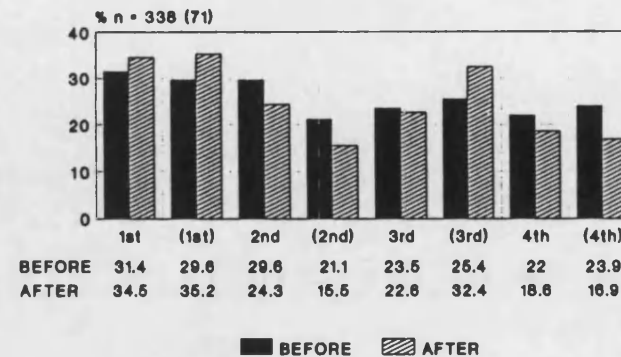


B15a. It is important to keep financial records because:-  
It helps plan production



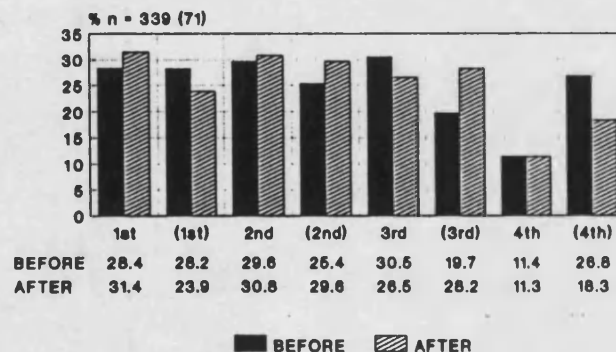
Corr.Co = .2301(.1246) P = .000 (P = .301)  
Mean = 2.6540(2.6901) / 2.7820(2.6479)  
St.Dev = 1.1619(.9349) / 1.1309(1.1361)

B15b. It is important to keep financial records because:- It would be difficult to prepare a tax statement without them



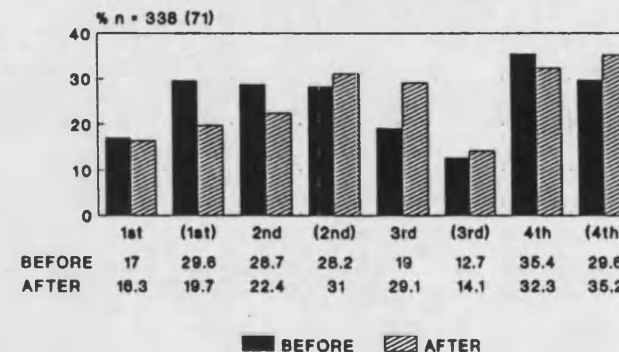
Corr.Co = .1904(.1686) P = .000 (P = .160)  
Mean = 2.3607(2.4368) / 2.2522(2.3099)  
St.Dev = 1.1410(1.1666) / 1.1194(1.1267)

B15c. It is important to keep financial records because:- It prevents the company selling products at a loss



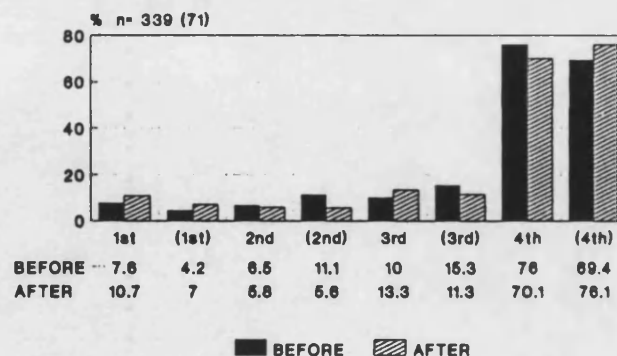
Corr.Co = .1498(.1273) P = .006 (P = .290)  
Mean = 2.7407(2.4607) / 2.1773(2.4088)  
St.Dev = .8938(1.1686) / 1.0017(1.0498)

B15d. It is important to keep financial records because:- It helps prevent theft from the company



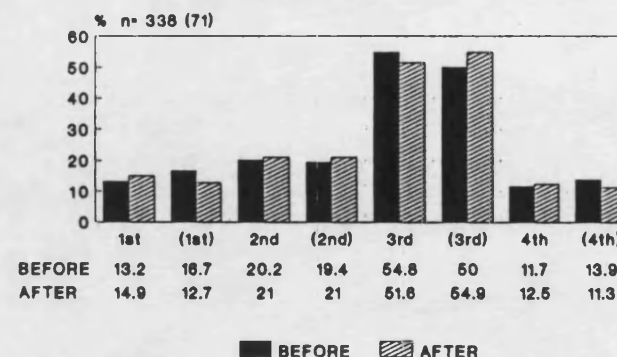
Corr.Co = .1672(.1368) P = .004 (P = .248)  
Mean = 2.7784(2.4226) / 2.7737(2.6479)  
St.Dev = 1.1173(1.2031) / 1.0722(1.1600)

**B16a Best Way to Learn how to Start a Business: Is to start the company and learn from your mistakes as you go along**



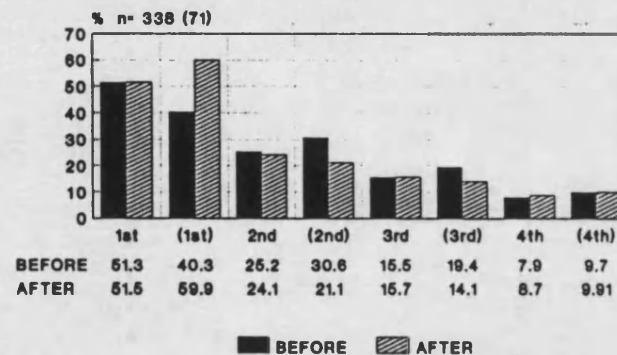
Corr.Co = .2756(.2124) P= .000(P= .075)  
 Mean = 3.5425 (3.5000) / 3.4290(3.5634)  
 St.Dev = .9150 (.8558) / 1.0036(.8901)

**B16b Best Way to Learn how to Start a Business: Is to employ someone who has the necessary expertise**



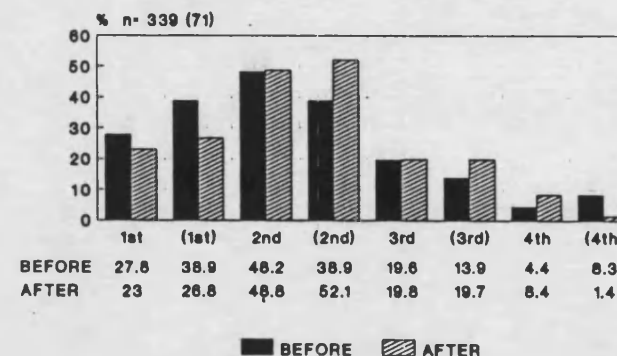
Corr.Co = .1130(.3460) P= .038(P= .003)  
 Mean = 2.6510(2.6111) / 2.6181(2.6479)  
 St.Dev = .8631 (.9277) / .8668(.8468)

**B16a Best Way to Learn to Start a Business: Is to pay for a short course in business management**



Corr.Co = .2756(.2124) P= .000(P= .075)  
 Mean = 1.8006 (1.8661) / 1.8169(1.7867)  
 St.Dev = .9738 (.9999) / .9948(1.0270)

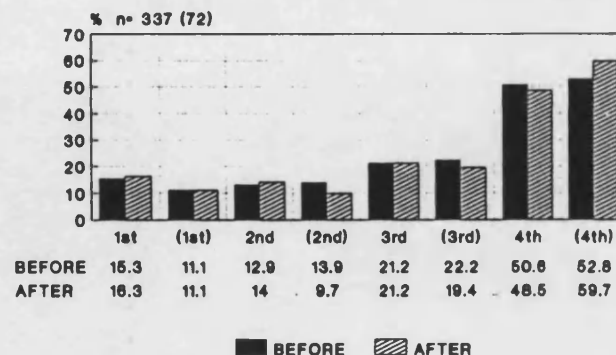
**B16d Best Way to Learn to Start a Business: Is to seek advice from a successful business person**



Corr.Co = .1838(.0801) P= .001(P= .807)  
 Mean = 2.0056 (1.9167) / 2.1366(1.9577)  
 St.Dev = .8068 (.9307) / .8649(.7258)

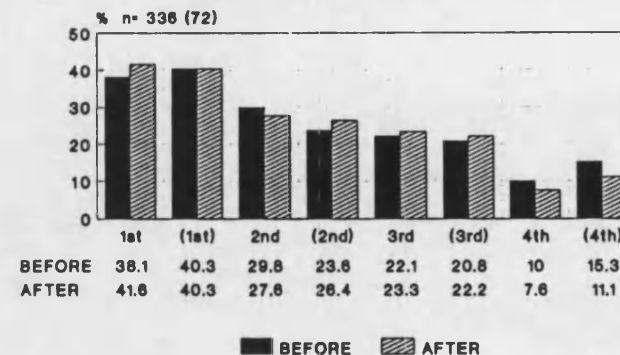


**B17a The best way to ensure your company produces good quality products is:-  
Design it so it can be made easily**



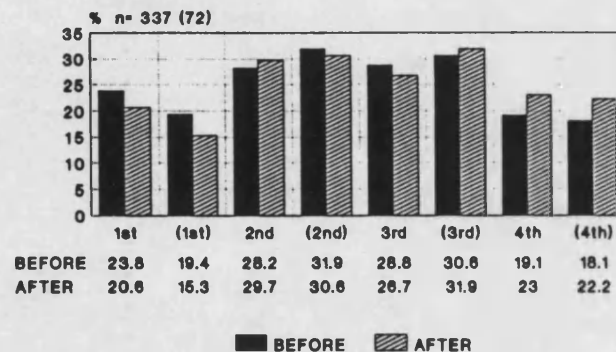
Corr.Co = .1976(.3712) P= .000(P= .001)  
Mean = 3.0706 (3.1667) / 3.0203(3.2778)  
St.Dev = 1.1161(1.0481) / 1.1311(1.0376)

**B17b The best way to ensure your company produces good quality products is:-  
Have a series of quality control checks**



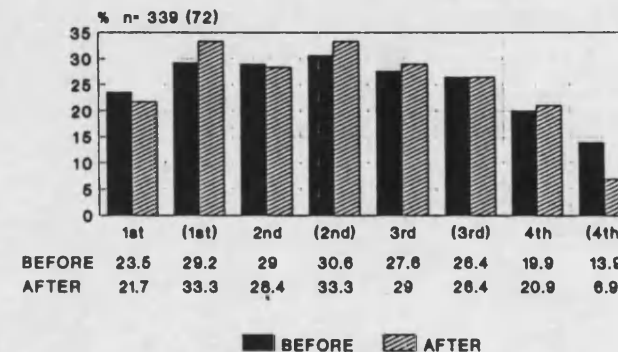
Corr.Co = .1563(.0934) P= .000(P= .001)  
Mean = 2.0413 (2.1111) / 1.9680(2.0417)  
St.Dev = 1.0021(1.1077) / .9769(1.0406)

**B17c The best way to ensure your company produces good quality products is:-  
Give a guarantee with each product sold**



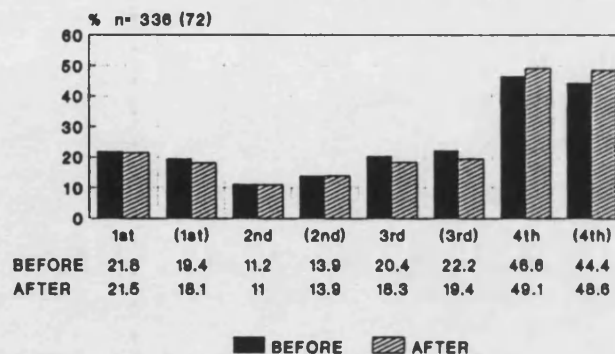
Corr.Co = .2296(.3247) P= .000(P= .006)  
Mean = 2.4324 (2.4722) / 2.6203(2.6111)  
St.Dev = 1.0624(1.0066) / 1.0606(1.0008)

**B17d The best way to ensure your company produces good quality products is:- Give  
courses so workers take ideas seriously**



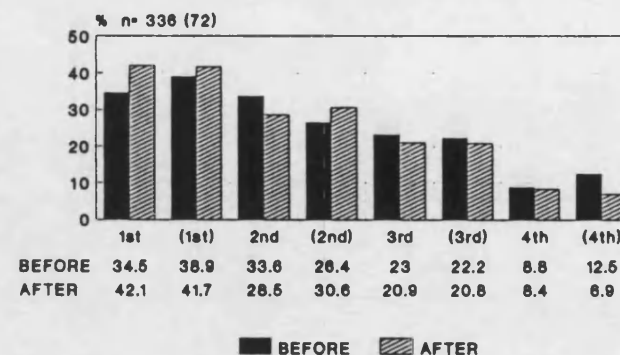
Corr.Co = .2476(.3162) P= .000(P= .007)  
Mean = 2.4399 (2.2600) / 2.4699(2.0694)  
St.Dev = 1.0672(1.0312) / 1.0613(.9394)

B18a If a product is not selling well  
the best plan is to:- Stop production  
and sell remaining stock at a cut price



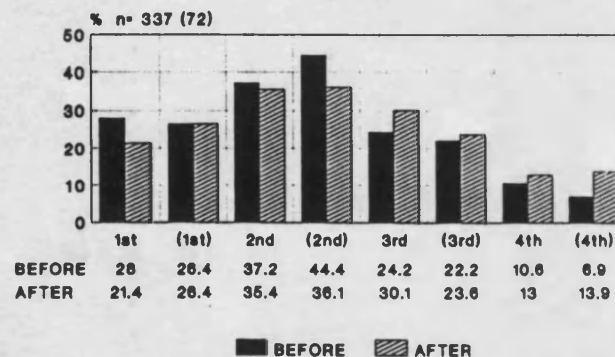
Corr.Co = .3831(.4002) P= .000(P= .000)  
Mean = 2.9174 (2.9167) / 2.9606(2.9661)  
St.Dev = 1.2037 (1.1719) / 1.2100(1.2100)

B18b If a product is not selling well  
the best plan is to:- Try to sell the  
product in different markets



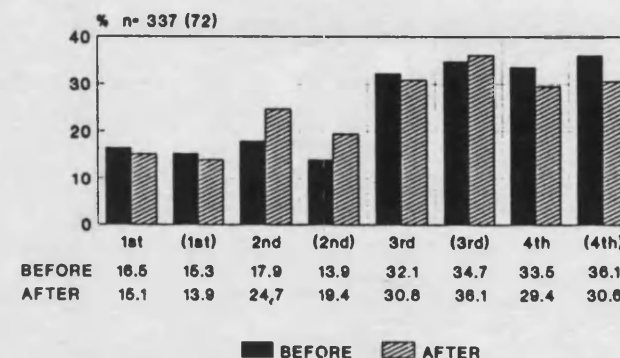
Corr.Co = .3456(.3545) P= .000(P= .002)  
Mean = 2.0619 (2.0633) / 1.9564(1.9306)  
St.Dev = .9834 (1.0582) / .9843(.9543)

B18c If a product is not selling well  
the best plan is to:- Try to cut the  
cost of production



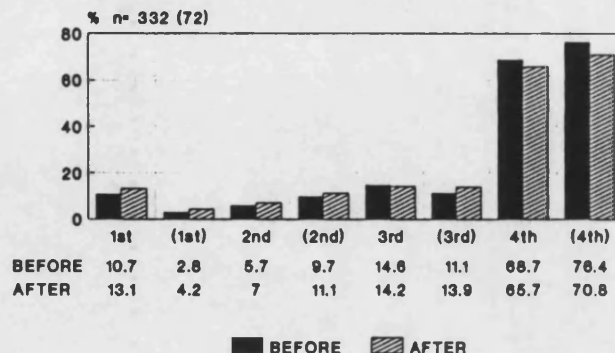
Corr.Co = .1007(.1645) P= .086(P= .167)  
Mean = 2.1740 (2.0972) / 2.3479(2.2600)  
St.Dev = .9688 (.8747) / .9588(1.0035)

B18d If a product is not selling well  
the best plan is to:- Pay more for  
advertising



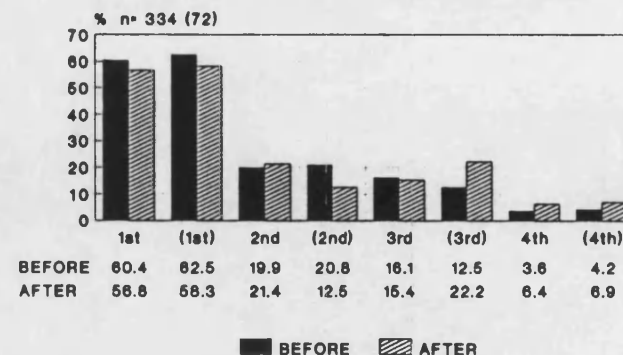
Corr.Co = .1782(.2888) P= .001(P= .016)  
Mean = 2.6266 (2.9167) / 2.7442(2.8333)  
St.Dev = 1.0709 (1.0682) / 1.0407(1.0209)

B19a. If a bank lent your business some money they would:-  
Ask your parents to guarantee the loan



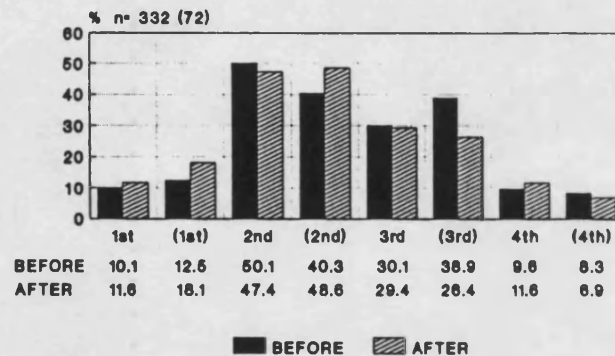
Corr.Co = .3164(-.0129) P= .000(P= .914)  
Mean = 3.4090 (3.6111) / 3.3269(3.6139)  
St.Dev = 1.0104 (.7792) / 1.0711(.8667)

B19b. If a bank lent your business some money they would:- Ask what you wanted money for and how you would pay it back



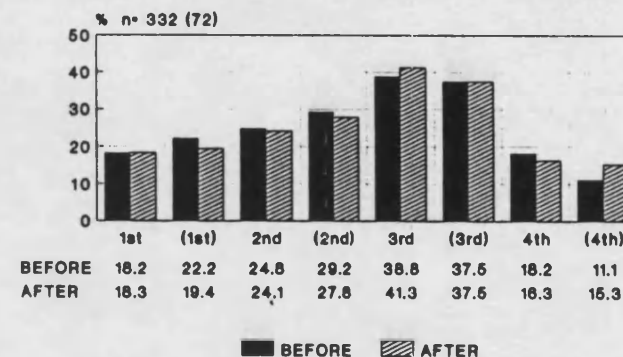
Corr.Co = .1773(.2271) P= .001(P= .056)  
Mean = 1.6260 (1.5633) / 1.7130(1.7778)  
St.Dev = .8764 (.8681) / .9471(1.0240)

B19c. If a bank lent your business some money they would:-Ask how much you would expect to make in the first year



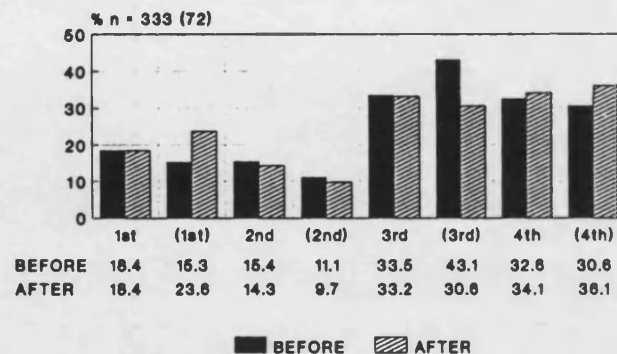
Corr.Co = .1558(.0231) P= .004(P= .847)  
Mean = 2.3910 (2.4306) / 2.4099(2.2222)  
St.Dev = .7963 (.8192) / .8421(.8260)

B19d. If a bank lent your business some money they would:- Ask to see the last years set of accounts



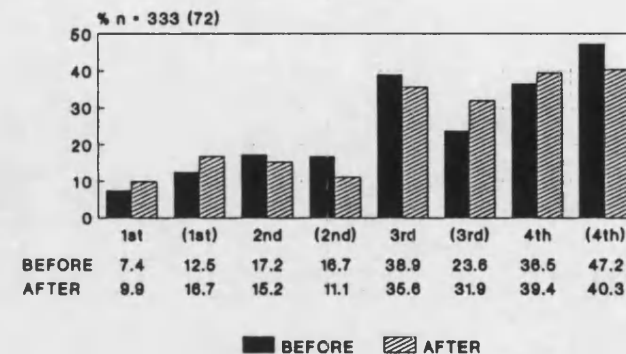
Corr.Co = .0920(.2993) P= .094(P= .011)  
Mean = 2.8042(2.3760) / 2.6662(2.4861)  
St.Dev = 1.0871(.9569) / .9703(.9786)

B20a. It is important for a business to conduct research because:- It helps them produce an action plan



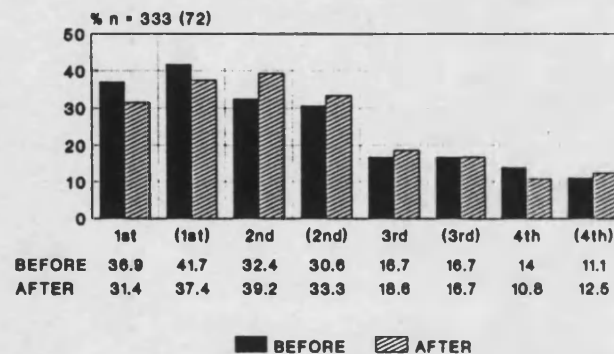
Corr.Co = .1888(.3113) P= .001 (P= .008)  
 Mean = 2.8042(2.8889) / 2.8309(2.7917)  
 St.Dev = 1.0871(1.0148) / 1.0926(1.1741)

B20b. It is important for a business to conduct market research because:-It help -s to advertise its products or services



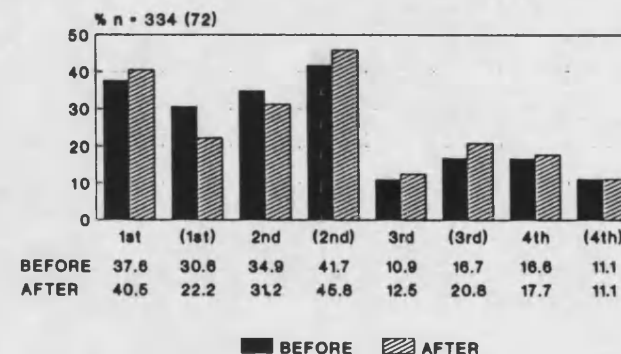
Corr.Co = .2086(.3501) P= .000 (P= .003)  
 Mean = 3.0446(3.0556) / 3.0437(2.9563)  
 St.Dev = .9134(1.0732) / .9708(1.0934)

B20c. It is important for a company to conduct research because:-It helps them to design product or services for public



Corr.Co = .1554(.2027) P= .004 (P= .088)  
 Mean = 2.0774(1.9722) / 2.0872(2.0417)  
 St.Dev = 1.0462(1.0206) / .9619(1.0289)

B20d It is important for a co.to conduct mk. research because:-It gives info. to help sell prod/servs. at the right price



Corr.Co = .1822(.1078) P= .000 (P= .367)  
 Mean = 2.0661(2.0833) / 2.0360(2.2083)  
 St.Dev = 1.0710(.9806) / 1.0782(.9163)

## **APPENDIX 7(a)**

### **Example Transcripts of the Semi-Structured Interviews Conducted with Students who had Participated in a Mini-Enterprise**

SCHOOL 'A' 1300 Mixed Comprehensive - Located in a market town

Type of activity - Young Enterprise

Duration - 2 hours a week for nine months + several days in the holidays + evenings to sell the company products.

Size of company - 29 at first, dropped slightly then rose to 30. Achievers all attended an initial meeting and then divided up by self selection into three companies.

*What did the company do?*

The company made mirrors (stands), lavender bags, magnet holders for messages on fridges etc. and then tendered for an contract to supply programmes for a charity event.

*What of the products did you like making best?*

S:- "The advertising was fun but I did go out and sell the advertising. The mirrors were good because the designs were great."

E:- "We wrote out a list of all the companies in 'X' and then some of us went round in the holidays and told them what it was all about and showed them a mock programme and showed them where the space was and told them about the prices and then went back a couple of days later to see if they were interested."

*Did you make an appointment before you went?*

"No, just walked in."

*What was their reaction to you?*

"Some of them didn't think we were genuine because we looked too young, others thought well they're at school we'll help them."

*What about the manufacturing side of your business, where did the ideas come from?*

M:- "Some people made them up as we went along but we got a bit frustrated trying to cut mirrors and things. We had a few breakages in the cutting but we scraped our way through."

*Did anybody come up with an idea that was not made?  
So all the ideas you came up with you made?*

Sa:- "In the beginning we all sat round and thought of products and thought wouldn't it be good if we could make this but it was a bit extravagant and we realised that we didn't have the capabilities so we were a bit more careful. But we made the programme and some posters and tickets. At Christmas we made little stockings to make some money."

*For the advertising you say you tendered for it. How did you come to win the contract? What did you have that the other companies didn't?*

K:- "There was a meeting between the Headmaster and the advisers and we came up with the mock design of our programme and the other two companies also came up with designs and ours was just chosen as the best, the most suited to the programme.

*It wasn't done on price then?*

A:- "I think we were the cheapest."

M:- "Yes and we also said we would give 35% of all the profit to a charity."

*So how did you come up with the winning bid, how did you decide how much it was going to cost you and how much money you were going to make on it?*

L:- "We decided that they would be 50p to sell but I don't know how much they were to make."

S:- "Well we got them printed quite cheaply, I'm not going to tell you how cheaply, but it was not much at all, well hardly anything actually, and to begin with we thought it was going to cost us about £46.00 for everything, 500 tickets, 350 programmes and 50 posters. We thought it ... well we went round and found the cheapest way of getting it done and it was going to cost us about £46.00 so that's how much we charged the school. We made money on advertising and we also put advertising on the back of the tickets as well. But that caused a few problems as well."

*You have spoken a lot about this but what about the other products? Do you talk about this because it the most recent venture or because it made the most money?*

"Until recently, when we started the advertising and programmes, we had made only 47p profit ... its terrible ... then we came up with this and made quite a large profit which made a lot of money for us."

*Why only 47p?*

E:- "I think there was about £30 that went missing .... I don't know."

*Who was the accountant?*

"A. was for a while then we changed after Christmas. I think we spent a lot of labour on things that we didn't sell at much of a profit. We thought that we were going to charge more for the mirrors.

"But we didn't in the end"

*What did you like least about it all?*

T:- "Everybody seemed to take an instant dislike to the mirrors"

*Do you mean everybody in the workforce or literally everybody?*

T:- "The workforce, the people who were designated to make them. We came up with the designs and everybody was all enthusiastic at first and then when it got down to people getting the materials and bringing them in on time and to cut the wood and sand it and break the mirrors, there were a lot of breakages there. We had a lot of frustration getting the mirrors onto the wooden surface, we stooped to car body filler at one point, it was suggested by one of the advisers, it failed miserably so we went back to glue and paper. It was just that we were making them all throughout the whole year and we got sick of the sight of mirrors of making them, of the design of everything."

*You are obviously selling them though*

T:- "We did actually manage to sell all of them I think"

A:- "We didn't make very many though"

*So you didn't like making the mirrors because they were repetitive?*

M:- "We also had problems with filing down the wood we had, it was plywood and there were a lot of instances where everytime you put a file to it, it splintered. The painting didn't go too well either to begin with."

*What about the running of the company?*

S:- "We started by having board meetings every week didn't we? Then people would just arrive and go to what they were making ... fluffy creatures, and we just had a meeting well ... not as often did we? We just had a meeting when we had something to say."

*How did you run/control your company?*

T:- "At first it was all democratic, when everybody elected the Managing Director and the Secretary and down and down until you just had the work force and everybody was happy. Then it seemed that the management were stuck up in one place doing a lot of work ... paperwork and we were in another place making these stupid mirrors. Animosity built up because we were down here slogging away on bits of wood which wouldn't go right and they were up there and we didn't know what they were doing. So that relationship wasn't very good at first."



*Poor communications between work force and management?*

T:- "No it was both ways really.

*What about the finance, all the materials cost money where did the finance come from?*

H:- "We raised it first by selling shares and that paid for a Y.E. box. we got the Achievers handbooks and stuff. We had a loan from the bank to pay for the box, but they said if we didn't pay it back it didn't matter. But I didn't want to borrow from the bank anyway. Then we sold £93.00 of shares and we used that to buy stock and we hoped to pay that money back. I don't think we ever worked at a loss."

*Did anyone make a business plan?*

Silence.

*When the idea of the mirrors came up how did you decide to go ahead with it, how did you decide that it would make money for you?*

H:- We went through the pros and cons. We worked out how much it would cost ... 'cause we made lavender bags they were cheap to make with old bits of material from home and we got the lavender cheap ... well free actually ... and all we paid for was the lace. With the mirrors, the wood was cheap too that's why we couldn't really complain about it splitting. But its just as well they were cheap because with what we had to pay for the paint, the mirrors and the varnish we would have been making a loss."

*So you didn't at any time have to go to the bank and get a loan?*

No.

*If you did have to go to the bank to get a loan do you think they would have given you one?*

H:- "No, I think we would have had to sell more shares." I don't think we could have asked for a loan."

*Why not?*

H:- "Well they had given us the £30.00 loan, it was a kind of gift, they said, well have it pay it back if you can if you can't, don't worry about it. And everyone thought it would be better to sell more shares and have less net profit than go and get a loan from the bank."

A:- "If the mirrors had been a real flop we would at least have had the fluffy creatures and the lavender bags to fall back on. We sold all the lavender bags we made and the fluffy creature we

popular too."

*Did anyone find they were bored during the Y.E. experience/*

A:- "There were two or three weeks when we came and did absolutely nothing but sit and chat because there didn't seem to be anything to do."

*What was the point of all the effort, why did you give up time to take part?*

T:- "I'll go for it. We saw last years company made some money out of it, so that was one reason for doing it, the thought that we might make some money. But you've always got people telling you that it was good experience. This certificate you get at the end of it is worth an 'O' level bla bla bla. There were people telling you that it was a good thing to do. That was one of the main factors."

A:- "We did it 'cause it was fun"

H:- "Yes I thought that ... most of the time".

*Did you make new friends?*

A:- "You mix with people you don't mix with at school. Probably it was good experience because you had to get on with people you couldn't stand. You had to forget all about that. It was difficult because you were in school and you couldn't really say ... Your not working hard ... because they were your friends in school. I think that was the worst bit."

A:- "My sister had done it before and she had told me about it, she told me about the exam, so I thought well she's done it, I might as well do it as well."

" I thought it would be interesting ... it was most of the time. "

"You could learn new skills like accounting, and its just like working on a production team and you can work out whether that's the right kind of job for you. That was what was good about advertising it was really interesting it gives you an insight into what the job's really like if you'd like to do it."

*Is this kind of experience, Y.E., better than going on a work experience?*

"When you are in your own company you can't rely on anyone else but when you go to work experience its only like a taste of a job you don't actually have to do it properly."

general agreement

*How does Y.E. differ to the work you do in school everyday?*

M:- "There was a better working atmosphere, well some of us were not subjected to hassle from teachers. We felt really relaxed in what we were doing and it helped enjoy work a lot more. I think most people would agree."

"I think the advisers found it difficult because we were in school and we were based in school and I think they found it difficult to make us realise that we weren't in school and they weren't teachers."

*Who were the advisers?*

"They came from British Gas, I.B.M., I.B.A. and Lloyds Bank. Each company had their own advisers. At first they were general advisers then each company had its own."

*How did you use these people?*

H:- "They'd put forward suggestions. They would say if what you were doing was not a good idea or it is, or perhaps you ought to think about it a bit more. but they never said ... or condemned what you were doing. Like that Tee shirt printing ... they never said that's stupid it will never get off the ground although it never did."

*How did you decide that it would never get off the ground?*

H:- "We did some research and found out that it would be really expensive to do the dyes and things and we asked people around the school whether they'd be interested and they didn't seem very enthusiastic about it."

*Is there any similar experience to Y.E. going on in school that you know about?*

A:- "I don't think so, they do it at 'X' sixth form college as part of their foundation studies, its the same Y.E. scheme but its done in college time as well as after college."

"Business and Information studies isn't really like it"

"What about the other one?"

"No that's not like it"

"I think the time is wrong. I think next year it ought to start in the fourth year. I know I had a lot of time off because I was ill, but some people found that the course work was getting on top of them and they stopped coming. Which is hardly surprising. Perhaps if it was run from the fourth year until Christmas and then stopped so people could just spend their time on their school work instead of worrying about presentations and that."

"Yes we would have had better attendance it really went down a lot during mock exams as people were revising. I was personnel so I knew quite well."

*Did you have enough people still to run the company?*

"We had to cancel quite a few."

"It was a waste of time coming because there wasn't enough people to do anything. Those who did come had to be dragged along because they weren't motivated to do anything. Because they were thinking I've got 11 this revision to do when I get home."

*Were there any teachers involved?*

"Dr. X" (Headmaster) and Mr. 'Y'.

*What did they do?*

"Mr. 'Y' was a craft teacher"

*Was his role any different to any of the other advisers?*

T:- "He wasn't there to advise as such, he was there to advise on materials and to help with the facilities which we could use. He was just always there if you needed him. He didn't exactly advise you."

*Did you feel any different about him because he was a teacher?*

"The other group with Dr. X as adviser had too much pressure put on them in getting out their reports and that. He came into one of their lessons and started shouting at them because they hadn't got some things in to be printed. And if someone is in from the area board he'd glare at them to make sure that the people thought that everything was wonderful. The M.D. would be trying to run everything and she might say right lets start to work and he'd say. ... Just a minute don't you think we ought to do this or that... He didn't advise, he told. I think some of the other advisers were annoyed. I think he was giving the other advisers some pressure to."

*Do you all feel then that you would get more out of this experience if you were left to make your own mistakes, rather than being prevented from making mistakes?*

" I think is good to have somebody there so if you are desperate and do need to talk to someone you can go and see them and say what do we do? But I think we could have done without Dr. 'X'."

*What about other teachers?*

" Mr. 'Y' was alright because he was supervising with the tools and

that, what you wanted but I think if there had been any other teacher in there it would have been off putting. Because you were on first name terms with the other advisers and you looked on them as your friends rather than someone you had to call Mr. 'Z'. And you could ring up at home if you really had to get a report finished or something."

*Were there any real problems you faced as a group that you hadn't previously met at school or perhaps, anywhere else?*

A:- " It was mainly communication. You couldn't do it on your own you had to .....

M:- "I think people split up in their own fractions to start off with and would only go with their friends. That was the main problem and they wouldn't leave. In the end we had groups of friends doing different things. After that it seemed to smooth out."

*How were the groups formed?*

"I can't remember. We all met in a room and then they said ... There were going to be two companies some of you go up stairs and some downstairs ... So you had to decide whether you were going upstairs or downstairs. The following week certain people had to say I'll go and help with that company because considerably more people turned up. But then it was like groups of friends."

*So most of you were friends to start with?*

"It was just groups of friends."

*Any more problems that you had to face up to during Y.E.?*

"The advertising, it was fun to start with, but it has certainly hard work, I didn't realise it was going to be that bad because we had to go to places after school and they'd say can you call back next week it just got too much after a while. I was really glad when it was all over."

"There was one time in a shop when we explained that we were giving 30% of the profit to charity. She couldn't understand why we couldn't give 100%. We explained it was for our business and that we were trying to get profits, she didn't seem to understand."

"She got quite upset actually because she kept on going on at us. It was obvious that she didn't want to help and she kept on going on at us didn't she. (looking at others)"

"The shops didn't seem to take much notice that you had other things to do, just expecting you to be available to come back for them."

*Is that a problem you think that you would have to face if you were doing the job full time?*

"No I think you say well I can come back then, but never again and they would have to have made up their mind by then. But because there weren't that many businesses in 'X' we had to yes o.k because we needed them."

"Sometimes you made an appointment with them."

*What about you, did you have any problems that you can recall?*

"Only the presentation, I don't think I would ever get involved in anything like, that not if I could get out of it."

"It was quite fun really, but we had to come in on Sunday and one of the advisers really let us down and only turned up for one rehearsal so we were trying to get something down on paper and organised get us looking smart and make sure we were there on time, it was quite difficult really. And trying to think what to say in front of these people."

*How long did you have to speak for?*

"Two minutes each but that was when we only had 47p profit. That was really embarrassing trying to get around that and trying to explain ... we had a copy of what we were doing (the programme) and the people we were talking to, took an interest in that so we could sort of skip over it."

"We did explain that all out money was tied up in stock"

"Another problem we had was selling. We had very few places to sell, to parents and friends. We had a few parents evenings and we sold at a craft fair. We didn't sale much at presentation evening because the sales manager didn't turn up."

"The people who went to the craft fair, that was an afternoon they had to get transport there and back again. I didn't realise there was so much involved. I just thought that there would be two hours a week on a Tuesday and that was it. You could come home and forget about it but it wasn't, not in the slightest."

*So in that sense it was very different from school?*

"We couldn't sell our product in the shops."

*Why not?*

"Well we got the idea from 'Y' (A book and gift shop in the town) and we thought that these were an incredible rip off so we thought we'd make them so we couldn't very well ask them to sell them for us and there wasn't anywhere else. With the fluffy creatures, we made them over a long period of time so there

wasn't enough to stock a shop with."

"It would have been better if we could have got the materials for the fluffy creatures cheap ... at a wholesale price. We got it from John Lewis at £1.50 a bag and we had to sell the fluffy creatures at 50p to make a profit."

"Because we are at school if we have problems at Y.E. it comes into school and there could be some bitchiness or catiness."

*What between the groups?*

"No between people in the same company if something goes wrong in the company and you still go on them at school as well."

"It was ... if something had gone wrong if it was a business you'd have to say ... shout at the person ... or say not any individual ... you'd have to explain, not say ahh you ...."  
(tailed off)

"When you got back at school it would have been just hell if you'd carried on like that all the time, or when you had something not made right or someone not turning up on time."

*Did you learn something about your relationships with other people from what you were doing?*

"You can't chastise people and say ... Sorry you're not doing this right ... Because they can except that on the Board you have authority over them, like if you were in a work situation they could appreciate that you were their boss and they had to do what you say. I think it would be better if you could get people from a different school ... that would be a completely different situation. I am not saying it didn't work, it was good, but it would have better say with people I hadn't known all the time I'd been here."

*How did you allocate the roles within the company?*

"Somebody was nominated then seconded then if you had two people we'd have a vote."

*How did you all make your decision to vote for that person or someone different?*

"We voted for our friends."

*And did that work?*

"Well sometimes it did. But I was secretary and I had an argument with someone during the day and they said a woman ought to be secretary. I said that was chauvinistic so when it came to it they said say she going to be secretary and I said what. They said yes go on, and everybody voted for me and I became

secretary."

"Also we looked at people who were good at that subject in school ... like we voted for A. for accountant because she's good at maths and S. does business communications and she's good at that subject so she became secretary."

*The boys seem to have been eliminated from office. Did any of you hold any of the senior positions?*

"They did (laughter)"

T:- I was production manager for half a year then I was a slave. I think there were about twenty females and six males or something ... we were outnumbered."

H:- "There's always been an imbalance in the company."

*Has that been a problem?*

"No not really."

*What would you like to do when you leave school?*

Computing or Engineering

Veterinary College

College and then a Graphics Designer

College and after that no idea

I have a place of a Y.T.S. to work in a medical school

College then I don't know

College then what ever happens

College University then to study Law

College and I don't know

College to study languages then I'm not sure

College then something like a Building Society

College then university or polytechnic

*Has the Y.E. Experience helped any of you to decide what you want to be or in any other way?*

T:- I'd already decided but maybe it's shown me what to look out for if I went into industry because maybe it was good experience ... I've learnt something."



"Its made me more aware of the managerial side of things. What they have got to do the responsibilities but it didn't help with my career in any way."

"Its helped me learn more about what goes on in a company and how to work with people, how to get on with them."

"I'm sure I've learnt something, I've done different things. If I hadn't done Y.E. I wouldn't have done them. I think I've learnt lots of things because its not like a business, a company like I.B.M., but I think it helped me to decide I'd like to go into company law."

"I think it helped me to see that I could hold a variety of jobs but not be above any other people ... like the same as me. I can do the job, but I wouldn't want a Managing director over me and a workforce under me. I couldn't do that. Because I'd be trying to keep on the right side of the Managing Director and trying to keep on the right side of the work force. I'm not cut out for that."

"It hasn't really helped me decide but its taught me a lot about working relationships."

"I've learnt lots of things about accounts that I didn't know and what I learnt I didn't like."

"Yes, I worked in accounts, but I went away from there because I didn't like it particularly. I learnt a lot about advertising but it was hard work."

"It taught me that there's a lot more involved with that sort of jobs than I thought there was."

*Has Y.E. encouraged any of you to set up your own company?*

No

No

No

No

No

No

"I've already done that"

*Can you explain?*

"We washed cars."

*Can I ask you about the reaction of your parents, both initially and now the things are winding up.*

"Interest at first when I asked them to buy some shares then again when they got some money back on their shares."

*Did they make a profit then?*

"Yes 20%, 5p per share."

"Interest at first, they thought it might get me out of the house. I think they were quite interested at first but it was a bit of a drag having to drive me back and forwards. With the shares they thought that they would get some money back. During the year they didn't say anything about it. Then when I brought the money home their eyes all brightened up that's all they thought about really."

"They were interested in the shares then they showed no interest at all. The same reaction when I brought the money home. I think they cheered them selves up a bit."

"Same really except my Mum kept on asking me, how are you getting on with the profit, she always wanted to know how her shares were going. She kept on saying, I think there should be a meeting of the share holders. And I said, You'll have one won't you? She was just saying that but she was quite interested in the share side of it."

"They were quite interested but when they asked what I'd been doing and I told them they didn't understand a word I was saying. But they were very supportive. They ran me around when I wanted to go back and forwards. I think they thought it was good, because they thought I ought to have experience about things like that, and they thought the exam was good."

"My Dad was interested enough to buy some shares, my Mum was interested and um it was o.k. until every night it was ..I've just got to ring Lez or something and it was ... Not another phone call... I think they got completely fed up with it, me having to be run around and perhaps if I'd have lived in 'X' and could have walked here. It was just I was bringing it home with me rather than perhaps just leaving it here and I was just going on about it all the time panicing about getting things done."

"They were interested all the way through really but I was not too sure that Mum was confident that she was going to get her share money back. She was quite pleased to."

"They just did what I told them."

"My Mum and Dad forgot all about the shares really. They were quite surprised. I didn't have much confidence that they would

get their share money back."

"I didn't like being out every Wednesday night."

"They seemed to be quite interested really but my Dad only seemed to interested in his money and how it was going. Every week it was ... How much money have you made? ... It really got on my nerves, I felt like strangling him."

"I think they were expecting to get about £5.00 rather than...."

"I got home and said ... I've got your share money ... and it was ... How much extra, you know how much have we got then? ... I said 5p on each share, it worked out at about £1.50. I'm sure they expected to get something like £15.00."

"Yes, my Dad said how much does that work out to per share. He said yes, that a 20% dividend, you did jolly well!"

"That was the most we were allowed wasn't it?"

"Yes we weren't allowed to to give them any more. And we had wages which ranged from people getting about £3.00, didn't it up to about £4.00 and then it was £2.80 for everybody as a bonus. Was it £2.00? "

*Did you have to pay any tax?*

"Yes, corporation tax and V.A.T."

"I think we ought to do as one of the other companies did and that was that management got a bit extra."

"It should be worked out on attendance."

"We did, wages were worked out on attendance. You got a certificate for 80% attendance."

*Is there anything that you could think of that would make it better?*

"It should be done at a different time, 'cause there was too much. Perhaps not when it was 'O' level and C.S.E. but with G.C.S.E. we really had to panic, well not panic but revise and then all the course work had to be in by Easter. And I was ill, I had six and a half weeks off then it was everything all in one go."

*What about doing it in school time, as part of the curriculum?*

"No, that would make it too much like school, and I don't think ... the advisers were saying that we don't like the fact that it's held in school but there is nothing we can do about it because we only pay something like 30p an hour for it."

"I think the think that made it different this year was that before people said like straight after school and the advisers came along about 5 o'clock and it ran until 7.00 p.m. But with the new school day we couldn't do that because we couldn't hang around until 5 o'clock when the advisers could get here so that made it a bit different. I think it would have been better with the old school day and we could have been home at 7.00 p.m. and it wouldn't have mattered."

*So when do you start now?*

"First we started 7.00 until 9.00 p.m., then we found our parents coming to collect us were catching the evening classes going out so we had to change our times from 6.45 until 8.45 p.m. which meant we were all disappeared and gone by the time the evening classes came out."

"Most people never turned up for 7.00 p.m. anyway, and if you're hanging around ... it didn't do a lot of good ."

"Which meant getting home for 3.00 - 3.30 p.m. then we had a few hours at home which was just enough time to have tea and get changed and then get a lift back here you know."

"It might be good to mix with people you don't know like from different schools."

"I wonder what it would be like if it was 'Y' (A rival school) and 'X' (the school being questioned)? And met somewhere in the town not in a school, let say somewhere like the Town Hall and met somewhere like that?"

"It wouldn't matter if you met in a school, as long as it wasn't your school."

School 'G' Large 11 - 18 Girls School in the centre of a city

Activity based in a tutor period approx. 1 hour every fortnight

*Can you as president of the company tell me what you do in your mini enterprise?*

Ann:- We have votes in the class of what we'd like to do and we started off with jewellery, then sweets then jewellery again. Then we went on to Vimo figures, then onto cocktails and milk shakes. It changes every month and we do something else but everyone is involved in what we are doing.

*How long have you been doing this?*

Claire:- We have been doing it now for about a year and a half now. We started in, I think it was December of last year. We've covered lots of different projects with the last project we covered we had a pretty good idea of how much to spend because we made mistakes before so we knew what to do.

*How many people are there in the class?*

32.

*Are you all involved or is there anyone who has opted out?*

No.

*Can you tell me what you like doing best with mini-enterprise?*

Jenny:- Just organising and having our own business which means that you are in charge and you do not have adults bossing you about. Which means that you can use your own ideas and everything. And its just that you're in charge it gets you ready for when you are older. You know what things to do and what things not to do and you know what goes wrong and how much money you can spend and what is the best prices and everything.

*What do you like least about it?*

Sophie:- I don't think there is anything I don't like about it. It's just like Jenny said it was good fun organising everything. It gives us good experience for when we are older and we come to do the same kind of job. Its just good fun.

*Is there anybody who can think of anything they didn't like about it however small?*

Ann:- We went to our second jewellery thing, it went a bit wrong we'd already done it once and the school knew what we were doing and they didn't like it as much they wanted something new. So after that we didn't like it so much because we didn't sell as

much as we wanted to. But since then we know what we are doing and we enjoy what we are doing.

*What was the point of doing the mini-enterprise?*

Lucy:- Well as people said before, we wanted experience and Mr. S. put it to us and we thought that it would train us in discipline and that. How we should cope in difficult situations, and working out profit and which things to sell to the public.

X:- It helps us to work together as well as working in a group. Although we have a few of us out here speaking its just because we've been voted here and not everybody can talk, so we all work together.

*What have you learned from doing it?*

Jemma:- We've been doing the accounts and it sort of gives you experience on how to handle money and working out prices of things, general sort of business experience.

Samantha:- I've learnt to work with other people a bit better than I would have done. You have to listen to other people's views not go ahead and do it on your own.

'Y' I just liked the experience really, working with other people, handling money, the interview with the bank manager.

*How many people went to the bank manager?*

'Y' We split the class in two really because we have been to two or three meetings and about ten different people went to each one.

'X' You had to listen to different people's views and bring in people who wouldn't normally do things. Like they would normally just go into a corner but they came and joined in and I learned how to bring out their views and everything. It's about how to project your own views in front of other people not be embarrassed about what they think but to have your own opinion.

Claire:- It's not just the experience its ... we've learnt how to make things that we wouldn't have chosen to do. You wouldn't normally think of making milk shakes or ear rings but we've learnt how to make them and now we know we'll make them at home and things like that.

Sophie:- I think this is the first time we've been asked what we want to do and how to organise it, before the teachers have not asked us but told us what we were going to do so we've worked together and worked out what everyone wants to do and we compromise and hopefully everyone gets to do something they want to do.

*I've hear the word compromise used by many of the people I've talked to. What do you understand by the word compromise?*

Sophie:- Well one person says one thing and another says another thing and you work together until you get an idea of what everyone wants to do and do that. So that both people are happy.

*You have just pointed out one contrast between this mini enterprise and the other lessons that you do. Can you think of any other contrasts between this and other lesson, maths English etc. that you do?*

Joanne:- Its really just not having the teachers coming around telling you what to do. You can do what you want as long as the whole class agrees with you. Its really the responsibility of doing it for yourself.

Helen:- In this business we all do it and the teacher doesn't come and say; 'We're all going to do this'. We decide what we want to do, we vote, and we have several idea and we decide the one we like and we say the one we'll do next time. We do it for the school, and if the school likes it we might do it again sometime. Not all the time are they keen when we've got a new idea. Some times it works and we please the school.

*When you say the school, do you mean the staff or the pupils?*

Helen:- It the pupils who buy and make the profit for us.

*Are there any other lessons which are similar to the mini-enterprise?*

Claire:- I think a lot of lessons combine into this, the accounting maths obviously and just other lessons they come in some where with ideas and things.

Jenny:- They all come in together but its all of them mixed together which is interesting and different. You don't have lessons where they put them all together and you can use them all at the same time. So its a good idea. You can learn new things like Maths and new things about English. Because in English you have to do things that reflect your views and things. It brings all the things together.

Sophie:- We were advertising. We put posters up around the school showing what we were doing. We did something similar in English when we were talking about how to attract peoples attention. We had to do poster for the cocktails so we made them bright colours so people would look at them we took a lot of time over that and so people knew when it was going to be.

*So English helped?*

Sophie:- Yes

Samantha:- When we were doing the posters the people who were doing them had to use art to attract people's attention and English to get the wording right.

*But you were using here skills from elsewhere. The lesson it's self was not like this lesson?*

No.

*Can I ask you about the role Mr. S. played. I know he brought the idea to you because someone has already told me that, but what role did he play after that?*

Jenny:- He just brought the idea to us and let it to ourselves. He just checked over things before we actually did it whether it was alright and whether it would sell and whether the posters were alright to project the idea we were doing. But he didn't have anything to do with it. He just gave the idea to us and we took it from there.

Claire:- If we have an idea we'll plan it out ourselves and if he is here he'll just sit at the back and listen and if he thinks there will be a problem he will let us know but he will not say completely no to anything we say. And he will buy the things but he will buy what we say we want not what he thinks will be better for us.

Helen:- He get us permission to put stalls up. He lets us go down to the staff room and sell things in there and he gets us permission to use the mixers when we are doing the milk shakes and things.

Sarah:- He gets the card for our posters and things and paper so we can do things.

Abi:- He gives us the basic outline of what we have to do but then we have to organise it for ourselves.

*Can you tell me then how that contrasts with what your teachers normally do?*

Ann:- Well normally the teacher tell you what they expect you to do, in this we tell him what we'd like him to do for us. When they give us homework teachers will say you've got to do this and then this. But in this its us telling him what to do.

*How do you feel about that?*

'X':- Its good because normally the teachers load things on us but in this we tell him what to do. He doesn't mind it, and we



tell him what we want and he does it.

Helen:- When we did jewellery we chose what we wanted to have in it because Mr. S. wouldn't know what the girls would want to buy. If Mr. S. chose thing no one would buy it because he didn't know what they like. But we do know what the other girls in the school would like so we chose what we wanted.

*What about the problems? Mini-enterprise never goes smoothly.*

Ann:- We were going to do jewellery again because it was a big success the first time, but then we found the girls knew what they were going to buy, and they had bought it the first time and they were not going to buy it again so they thought they would buy this again. So we had to go around again trying to bribe people into buying them. Like putting the prices down to 1p or something. So we found that wasn't a good idea doing it again because they wanted new and bright idea from us not the same ideas all over again like you get in the shops.

Samantha:- Sometimes there were arguments about what we would do next and how we were going to do it, people were always putting in different ideas, obviously.

Claire:- We had an idea once that some other people in the class put forward was making some sort of toys. But we planned it out after we had seen the things we thought it would not work because we ... they are mainly older people and they wouldn't want to buy toys and things so that didn't work out.

Louise:- Sometimes we have problems with the time barrier and sometimes we have to do it on one day then change it to another day. Because, say we have n't made the things on time or, we have n't brought enough things and we have to change everything around. We've made posters for one day and we have to change it again.

Rachael:- Like Louise said about dates, you could plan something for one day and then find half the school is going to a choir practice so you'd have to change it.

Lucy:- We obviously found that things, or the idea that we did had to be original otherwise the school wasn't interested and that was usually something to go by when we were planning different projects.

*There are a number of problems you have here, how did you overcome the problems?*

Claire:- They weren't very big problems really, because if there weren't enough people we just sorted something out so people could do it both ways. If we weren't ready, it wasn't that we didn't know what to do, it was just that we need a couple of days

to sort it out. But all the problems we had we managed to sort out on way or another. So they weren't really that bad.

Ann:- When we were doing the milk shakes, we found that some people were playing netball and some people were in the choir so that we had to get a list and find out who was in the choir one day and organise it so that some people like Claire would do it both days if they didn't mind and we had to have people wash up and everything. So we just worked it out between us, people don't mind doing two things they just help out when ever they can.

*Can I ask you about the roles you played? I see from your cards that some of you are general managers some of you are advertising mangers, how did you allocate these role?*

Jenny:- Well those two were voted in this year because we change it every year or every project and then Sophie was voted in, we were all voted in by the class.

*Why did you vote for them?*

Jenny:- Because we thought that they would be good as accountants.

Rachael:- At the beginning of the time we started the whole project, Samantha was already the accountant, so she knew about the books and all that and then we voted in Jemma, Ann was already the president it seemed only fair that she was on this board thing. And Claire did a lot of the posters that's why she is here.

Helen:- Ann and Claire were voted in because they were responsible and things.

*And your not?*

Laughter.

Jenny:- We voted Lucy in because she did help but she is one person who doesn't come out in anything so we thought we would give her a chance this time.

*How do you feel about that (talking to Lucy)*

Lucy:- I was away the day they voted me in.

Laughter

Lucy:- But I am glad that I am in. I hadn't done much before. I had helped out at lunchtimes in making things, but I hadn't done much before.

*Can I ask you this. This is the first company I have visited where everyone was a girl, usually the companies have been in mixed schools. Can I ask whether you think it has been an advantage to have a company of girls, would it have helped to have some boys or would they have just got in the way?*

Sophie:- I think because we are all girls here at an all girls school ... I mean obviously if we were going to take this thing further we would have to get some more experience with boys things but most of the things like jewellery were aimed at girls. Some of the things like cocktails and sweets, both sexes would like that but some of the finer things didn't succeed because we aimed them at too young a generation. The young people in the school. I think if boys were in the class we would have done different things, but .....

*So its influenced your products but not the way you have worked?*

Sophie:- Yes.

Helen:- I think it is really a blessing in disguise not having boys. At the age we are at now they are more interested in showing off to their mates sort of thing (laughter) They are ... really! We wouldn't have got on as well as we have with boys in the class. We'd have to change our products .. some of them to suit both sexes in the school. But as its a single sex school I think its worked pretty well.

*You only sell things in school do you?*

All:- Yes.

Louise:- I think that if we did have boys in the class if it was a mixed school, it would be much harder because you'd have to have a variety of different things, As well as what girls would like you'd have to have what boys would like as well. But then there would be more ideas of different things to do because boys at that age maybe more imaginative.

*I am fascinated by how well informed you are about boys at this age*

Louise:- They maybe more imaginative and think of more ideas. But we got on, we managed OK without them.

Abi:- I suppose, if you think about it, even if you don't have boys, we would have two ideas, one for girls and one for boys, but when it came down to it, the boys would go off and play football or something and wouldn't come and help.

Jenny:- We can't exactly say it wouldn't work, 'cause we don't know because we are not boys, it might have worked for all we

know, but we just think that the boys would want to play football. It might have worked better in a way because we don't know what boys like really and we know what girls like so we can just project it at them.

Samantha:- I don't know, but I think there might be a few arguments because we wouldn't be able to do jewellery and think we'd have to do something else, they would just not like it. I don't know but....

*You have certain skills that you have used do you think that the boys may have brought skill that you don't have?*

Heads nod

So you think that you can do anything that the boys can do?

*Can I ask you now if you have thought about what you would like to do when you leave school?*

Jenny:- Well actually my dad's an accountant and I'm thinking about being an accountant but I don't really know yet.

*Has this helped one way or another?*

Jenny:- It has a bit. Not much though.

Samantha:- I want to go into banking but I'm not really too sure.  
*Has this helped?*

Samantha:- A little bit.

Sophie:- I have n't gone into much detail. Its got nothing to do with this kind of thing but I want to be a music teacher in a junior school.

Jenny:- I want to be a barrister.

*Has this helped?*

Jenny:- Yes it has because you have to get people's views and things, and it makes you speak out really.

Claire:- I know I don't want to be in an office, but if I am, I don't want to be bossed around by someone else, I'd like to be quite high up.

Ann:- What I want to be is nothing to do with this really, I want to work in the police force. But it hasn't got anything to do with this.

*Has this helped in any way?*

Ann:- Not really.

Claire:- This hasn't helped me an awful lot either, I want to be a psychologist so.....

*I don't know, the psychology of selling?*

Joanne:- I'd like to work in television, that's what my dad does. I don't know what aspect I'd like to work in, but like Claire, I don't want to be bossed around.

Lucy:- I think I want to be a doctor, I don't know what field. But this hasn't helped really.

Catherine:- I want to be a scientific assistant.

*Has this helped?*

Catherine:- No not really.

Claire:- I don't really know what I want to be but if I did want to

Kelly:- Well maybe because its helped me communicate with other people, more than what I used to.

Y:- I want to be a doctor in casualty and this hasn't helped really.

Heather:- I want to be a P.E.teacher and working with people is a little bit like working in a school so it has helped I suppose.

Nina:- I want to be a mechanic but this hasn't helped.

Sarah:- I want to be in the Navy.

*Has this helped?*

Sarah:- No, not really.

*Why do you want to work in the Navy?*

Sarah:- Well I like that sort of thing.

Z:- I would like to do something with television/journalism, I well we all have been writing it all up to tell everyone what we had done and everything. Just write it out formally. I think this may have helped a little but not much.

Louise:- I'd like to be a graphics designer.

*Has this helped?*

Louise:- Sort of.

Abi:- I'd like to be in the Army but I don't think this has helped.

*Can I ask the whole class now, have any of you ever thought about working for yourself?*

Ann:- When I was young I wanted to be a boss of something and by doing this it has helped me, because being the president I had to tell everyone what to do type of thing. Normally I don't do that any way but its nice to know that you are doing what you want to do and that everyone else is doing that too.

Sophie:- I'd like to run my own private surgery so I'd be the boss of that.

Claire:- I want to be a child psychologist or a child speech therapist but I want to be by myself. I don't want to be a very expensive one because then you only get the upper class patients, and I wanted to get all kinds of patient not just the upper class ones that have loads of money. I want everyone to have a fair chance.

*Has this experience helped at all?*

Claire:- I think its helped me communicate more that I would have done. We all worked together, that's what's important.

Sophie:- I was going to be a music teacher in a junior school but if that fails I could be a music teacher for myself at home or something.

*Has this helped?*

Sophie:- Sort of yes.

Sarah:- I wanted to be a vet until I found out what qualifications you needed. I wanted my own surgery and things until I found out how many 'O' levels you needed then...well I decided to go in the Navy because I'M not brainy enough.

*Can I ask you what your parents think of this idea?*

Jenny:- My dad's a teacher so he thinks that this is really a very good idea for children to develop their skills like this. And he does that at his school, he lets the children put forward what they want to do, he gives them a chance but not run around and everything. So he thinks it's a very good idea.

Ann:- They think its a good idea. And when I sometimes bring stuff home...like when we went to see the bank manager, and I had to come in and talk to her. Its good that if you can't talk to someone here you can go home and talk to them about it, if you get uptight about something. Like if when my mum comes home from

work, if one of my mum's pupils gets on her nerves she just tells my dad. I like to do that with them as well.

Joanne:- My parents think its a good idea because it generally helps you to make decisions with the class and I have been known to take some of the work we do home with me. Because we did a song for the bank manager, actually we've done three songs for the bank manager.

*Does he appreciate them?*

Joanne:- He thinks they are funny. Sometimes he thinks they're good and sometimes he thinks they could be worked on a bit more. My mum and dad generally think that it's very good.

*Whose idea was it to sing to the bank manager?*

Joanne:- Well it was really me and Claire's.

*Tell me about how you came to think of this idea?*

Joanne:- It was more original than drawing posters and that and we also walked around the school singing the songs as well which not only attracted attention but they wondered what was going on.

It did help singing as well because the song was about the business. They just wondered what was going on and came over to see what we were singing about.

Nicola:- My mum thinks its quite good, because she has her own business and she thinks its quite good training.

Sophie:- My mum thought that it was quite a good idea because I got the job of collecting all the jewellery for when we had our jewellery sale, when we were going to make it. There was a place in Winchester where they sell it and several days after school I was going down getting this jewellery and coming home with it all. And my mum thought it was quite a good and everything and that it would teach us to look after ourselves...it give us training and that sort of thing.

Lenna:- I just want to point out to anyone who didn't see us singing how totally embarrassing it was.

Can I ask you about the money? Obviously you can't run a business without money, where did it come from?

Claire:- We started with the loan from the bank manager, which started off the business.

*How much was that?*

Claire:- £40.00 to start with. Then our first project was the jewellery and Sophie was the one to go and buy that and that

turned out very successfully and we made a profit on that, we made it to about £60.00. It gradually went up like that and the business has done quite well so far.

*Where do you keep the money?*

Ann:- The accountants got the books and all the money, but we keep the money itself in the bank.

*You have made profit?*

All:- Yes.

*What happened to the profit?*

Ann:- Its all gone into the bank. Straight in and when we want some money for a new project we just go and get some out.

*So you started off with £40.00, you have now got how much?*

Jenny- We now have got £101.68p.

*You have made a profit of about £60 and you have made that in how long?*

Jenny:- Just under a year.

*So what is your profit?*

Claire:- About 150%

*What will happen to the money when you finish the company?*

Claire:- Right at the beginning we decided that the profit, which we hadn't then made, would go to charities but we haven't decided which ones yet.

*You decided that as a company?*

All :- yes.

*Why did you not give the money to yourselves?*

Joanne:- We wouldn't know what to do with it.

*You wouldn't?*

Jenny:- Well, we would but its better that it goes to people who need it, some might go to AIDS research and those people need it more than we do so we thought that we would give it to them instead.

Helen:- We are not going to keep the money because its really a



bit selfish because we don't really need the money its people who are researching, or people who have something wrong with then that need money not really us.

Louise:- We didn't do this, the business just to make money we did it to learn different skills, like Helen said, we don't need the money, we've learnt what we needed to learn when we have finished the business then we'll give the money we've made to different charities that are worth while.

*Can I ask you what you would have done if you had lost money?*

Ann:- I don't know really because as we haven't done that its hard to tell.

*You must have had a few nights when you had the thought, 'What if I don't make money'?*

Claire:- If we lost money but had some left to try another product, we'd just try our best. But if we didn't we'd..We'd just have to think of a way to pay the money back to the bank manager, because he would be expecting us to get profit and everything.

Jenny:- We would have tried another project to get back the money. We wouldn't have given up that easily after all the work that we had done. We would have just gone ahead and planned again.

Louise:- Well, if we didn't do very well in the previous one we'd just have to try harder in the next one. We'd have learnt our mistakes from before and we'd try and do better than we did before.

*Where would you get the money from?*

Louise:- If we didn't have nay money left,,,I don't know, perhaps everybody would donate some?

Helen:- When we did it we always kept something in the bank to make sure that if we did fail we'd still have something to fall back on.

Sophie:- Some people said that we'd been doing it for a year and we haven't we have only been going since January. Our first sale was....

Claire:- We sold jewellery because it was coming up to Christmas and people would buy it for their friends.

*What do you actually call your company?*

All:- B. Enterprises.

*Can I ask you if there was an opportunity for schools to change to allow more lessons to be like this, do you feel that would be a good thing?*

All:- Yes.

*Could anybody enlarge on that?*

Jenny:- It might not be, because some people might feel that they didn't have to bother because there is nobody telling us what to do so they wouldn't learn a thing. Some people would want to learn so they would learn it but half the class might not do anything. It would have to be organised so that everybody gets involved.

Sophie:- I think that it a good thing. We've enjoyed doing it, we've enjoyed doing it by ourselves. If other lessons were like that we'd get more involved and we would want to do it. Most people look forward to this period, not because its not hard work, but because you actually get involved in something. Its not just teachers talking and you just writing it down.

*So you think the enterprise hasn't been hard work?*

Sophie:- Oh yes, its been a lot of hard work but its been enjoyable too.

Claire:- Its better as well because we are having to take control of ourselves and be responsible, where as, as a normal class having normal classes when we leave school, we'll think 'Heck, what do I do now?' Well have no experience with money, or responsibility so ... its just a good way to prepare us. *If I were the teacher and I set you homework and I take it in and I mark it. Here, I gather you did quite a lot of work outside, is that right?*

All:- Yes.

Helen:- As a class some people said; 'I want to do the typing', Claire did some and I did some. But Ann might say, I want some typing done and I say; 'Oh I've got some time, I'll take it home and do it.' So everybody helped and just chipped in and did what they could.

Claire:- Also, It wasn't just the typing we did at home, when we went onto the sweet project, they were done at home as well. In our own time and then we brought them into school.

*You actually made sweets?*

Several:- Yes

*What kind of sweets did you make:-*

Claire:- Toffee apples, cocoa nut toffee, orange creams, 'Be surprised', that was our own recipe that we made up.

*How were these sweets wrapped?*

Claire:- We had a sweet bag, we put them into a bag so that we didn't just have to put them into a persons hand.

*So what other things were done at home?*

Sophie:- Things that needed to be bought like when we did the jewellery. With the last project the ice cream cocktails we had to buy fruit. And people were asked to do that in their own time and people volunteered to do that and bring them in.

Jenny:- People brought in strings for the gift bags and cards and boxes that we could put everything in and put in the staff room. They brought in threads and some people did advertising at home if they didn't have time to do it here.

Louise:- A lot of people put a lot of time in, their free time in making posters. Like Claire she's made a lot of posters so has Helen and Sarah did that one ... she went home and asked someone to help her with them. And they are all done very well I think.

Sophie:- We didn't just do things in our tutor period and after school when it was homework, we did it in our spare lunchtimes we made jewellery and posters.

*Just give me a rough idea, how long each did you spend at home would you say?*

Louise:- As much time as we had to do it.

*You said that you asked Mr. S. for the paper and card, did you actually pay Mr. S. for these things?*

All:- No.

Claire:- We asked the cookery teacher whether we could borrow the mixers and things.

*You didn't have to pay them for the hire of those things?*

Claire:- No we just used them. They let us borrow them for the project.

Ann:- At one point we did offer to pay for the electricity, because there was a problem and we weren't allowed to use them.

We did get 'round them and we did offer to pay but I don't know if we actually did in the end.

*Who overcame the problem?*

Helen:- A group of us and Mr. S. He was very helpful because there was a problem with the kitchen staff.

*Was that teaching staff or the kitchen staff?*

Helen:- No the kitchen staff.

Jenny:- With the practice run for the milk shakes we had a blender and someone accidentally knocked it over and it broke so Mr. S. .... (some confusion) no someone broke it and Mr. S. .... anyway we had to do with one less at school.

*Do you think it would have been more realistic if you had paid for the card, paid for the use of the blenders. Did anyone think of doing that?*

Claire:- Because we are in school, we took it for granted that we would have card for free, that we would use the blenders for free but I'm sure if we had to pay for it it still would have worked because we had plenty of profit and we could have paid for them.

*I just wondered whether if you had to pay for all these things it would have made you more careful about how you used them?*

Ann:- We are careful with what we use, we don't like, waste the paper or card. So if we did use the card board we make sure that we used just the right amount and not take too much.

*What about the rest of the school. How did they react to you? You mentioned that you were self conscious about singing this song?*

(Shouts out from the back) It was awful they were just standing there staring at us.

*Its probably no worse than people at home watch the T.V. and listening to the same kind of thing.*

Claire:- You didn't hear the song!

*True.*

Sophie:- Some people when they bought the jewellery and they heard that we were going to sell the same type of thing again they said 'Oh no, not ...' but they still bought it. They think, 'not the 3'B's trying to be ingenious again', but they still buy things. So, even though they say it, I don't think they mean it.

*Has any other tutor group started a similar company ?*

All:- No

*Why do you think they have n't done it?*

Claire:- We discussed the idea that some other tutor groups might catch on to it but if they did we've had a years experience so we'd just beat them to it, we'd just try our best to beat them. I mean, another form made sandwiches and things, but I don't think that really worked. People take notice of us now because they know that our things are not just stupid, they know more about what we do.

*So you are a tried and tested company?*

Claire:- Yes.

Sarah:- Other forms have cake sales don't they? To raise money for their house charities ... and pancakes yes, but nothing like what we did. They don't change it, they only have cake sales and things don't they? They don't have, like jewellery and things.

Louise:- If anyone did try the same ideas that we had done for a business, we should feel honoured that they were trying to be like us. They must have thought that we had done well and we should feel honoured that they want to copy us.

Helen:- It doesn't really matter if people copy us, it just makes more money for charity.

*Is that the bell? O.K. is there anything else anyone wants to tell me about the company before you go?*

(A voice from the back) We're brilliant!

*Yes, I'll make sure that goes on the tape. Thank you.*

ends

SCHOOL 'E' - A mixed 11 - 16 Comprehensive School in an Urban Area

Activity:- Mini-Enterprise

What did you do in your mini-enterprise?

Nicol:- We made packages to put envelopes and paper in and we ordered that from a company that deals with the school. We did bookmarks and pens and pencils as well. Myself and Karen made some jewellery, and we went down the market and we had some jewellery to sell.

Did this group operate as one company, or did different people do different things?

Spencer:- Well, we got around a table and we got a director manager, and, Vicky was secretary. We had accounts and things like that, just like a business. To practice we made ourselves like a factory making sand bags and things like that, just to get ready.

Did you do it at this time, or did you do it after school as well?

Paul:- Now and at lunchtime.

How long did you do it for, when did the company start and when did it finish?

Paul:- I can't remember the time (when in the year) but it was for about a month.

There are eleven of you, is that right?

Yes

Was it the same number when you were running your company?

Spencer & Paul:- No there was one more, no two more.

Can I go around now and ask you, what it was about the mini enterprise that you liked best?

Anthony:- I can't really say. It was all very good.

Stewart:- I liked the sales. We did a school fete. We set up our stall and sold our packages there, I thought that was pretty good. I had to fix the price..... percentage of the goods that we were going to make profit with the P.T.A.. We'd agreed to give them a maximum of 20% of our profit. But I worked them down to 12.5%, then Miss told everybody that they would have gone down to 5%. No one liked me after that!

Scott:- I liked the part when we was setting up the stall for the fete. And selling stuff to people.

Nathan:- I liked the bit where we were going out buying the stuff.

You mean buying the supplies to make your products?

Nathan:- Yes. Me and Stewart had to go to the bank and open a bank account to operate the company.

Paul:- I enjoyed the sales down at Queensmead (Local shopping centre) because there were a lot of people and we got further experience selling.

Kate:- I liked making the jewellery.

Darrel:- My best part was when we went to Queensmead, 'cause me and Spencer, we were the only ones who sold anything. We sold about £20.00 or £30.00 worth the morning we were there.

Spencer:- The individual jobs, like production manager and all that kind of thing because that was.... because your job was to look after the company, like the production manager had to find out if everyone was doing everything right.

Vicky:- Pass

Peter:- I enjoyed working all together because we learnt how to work in a group and I also enjoyed going down to the shopping centre and selling things down there and handing out leaflets. And you could meet different people and characters there and that.

OK. can I now ask you what was the worst thing about mini enterprise?

Nichol:- I think it was having to make all our own decisions.

Darrel:- The name of the company (laughter) Miss said 'Right, all come up with your ideas and we'll compromise on what they are'. She comes in the next morning and said 'Minico'. And that was it!

Spencer:- Meeting the public, actually selling our goods to the public. Actually getting up to them and trying to tell them what was good about it, in the end I liked it but in the beginning it was pretty scary.

Was that because you'd never done it before?

Spencer:- We'd never done it before. It was Christmas wasn't it (asking the group) and we were in the middle of a massive centre, Christmas shoppers and everything, and we're sitting there on a

desk. We had to try and get people to come over and buy our product.

Vicky:- There wasn't really anything I didn't like.

Peter:- I think Miss had everything planned out. Sort of ..... she knew what the company's name was going to be and how we would sell things and where we would sell them, and things like that.

So you feel the decisions were being made before you even got there?

Peter:- Yes

Can I ask you what you think the point of doing the mini enterprise was?

Nicol:- It helped us communicate better with all sorts of people. To accept people and their arguments and that.

Spencer:- Being successful, because we had to make a bit of paper into a selling good and make as much as we could. We had to make it from a bit of paper to a successful product and selling it to the public. So we had to do it and fend for ourselves, as individuals.

You have mentioned this in passing but can I ask you more specifically, what kinds of things do you think you learnt from it?

Paul:- Just to study the outside world really, trying to get us to see the world from a different point of view. We were working on a study of 'Work'.

And did it?

Paul:- Yes.

Peter:- We can all put our ideas together and see which one is the best.

And you were able to do that in the mini-enterprise?

Nicol:- When we first came into this group in the beginning of the fourth year, we didn't, well, get on with each other really, we worked on our own for a while and this started us working with each other more.

Can I ask you how the mini-enterprise contrasts with the other lesson you do?



Peter:- I think this was better 'cause we could go out and do things instead of being in a room, we were out selling things in a shopping centre.

So you don't normally go out when you do your other lessons?

No

Was the experience similar to anything else you do in school?

Nicol:- PE I think.

In what way?

Nicol:- When you play games you work together as a team.

Spencer:- Business Studies, that is why some of us took this 'cause we couldn't get into business studies. This is as they do it at college, it is a bonus really. That's why we took it because of the similarity to business studies.

What similarities were there to business studies?

Spencer:- Business. In Business Studies you work out how to run a business, work on computers and that, although we haven't worked on many computers in City & Guilds, there are similarities to it.

Do they actually run a company in business studies as well?

Peter:- No

Spencer:- They've done research and they've done little projects and that but basically that was it. Actually a few of them wanted to do this.

Paul:- This course was designed to give us a look at the outside world, so Miss said.

And do you feel that's true now?

Paul:- In a way I suppose.

What role did Mrs. C. (the teacher) play in your mini-enterprise?

Spencer:- She played a very prominent part in it actually. She said go home, do some homework, decide on a name and make plans for it. We come back gave her our ideas of what we thought and she come out with 'Mini-co', she'd worked out where we sell, what we were making, where to get all the goods and all things like that, which I don't think she's suppose to do, but she thought she was helping. Which I don't think she did, because no one likes the name at all. Although she's a good teacher and that, I

think we should depend more on ourselves. That's why we made people do particular jobs.

Is there general agreement with that?

Yes.

So you all went away to think out the idea but when you came back it was her ideas that were used?

Paul:- She wouldn't let us decide for ourselves at all as to what we were doing. She always made our mind up for us all the time.

Do you think you would have made more mistakes if she hadn't done that?

Paul:- No

Do you think that you would have made better decisions if she hadn't done that?

Paul:- I think we would have learnt more through making mistakes if we had done it ourselves.

Nicol:- Each time she told us to go and think of the ideas we'd come back then and she'd say she didn't like them.

What kinds of ideas did you come back with of things you could make

Spencer:- We wanted to name which was a combination of different peoples name or something like that. Mini-co was totally different.

Nicol:- We wanted something unusual something people would remember.

What about your idea for the products

Peter:- We wanted to sell sweets and .... well we wanted to sell sweets from that window, she said she thought that was OK. we went away and when we came back she said oh no we could sell stationary. The Headmaster had obviously said that we couldn't do that, we weren't asked if we wanted to do the stationary.

Paul:- We couldn't do that because at break times the cooks in the hall they sell doughnuts and that sort of thing.

Do you think that was fair because you often hear that competition is supposed to be healthy?

Paul:- No sir. In the hall they, well if they don't sell anything they might have to go. So if no one went to them they would be out of a job.

If they had come clean and said to you, look if you do this some one might lose their job. You are only doing this for a few weeks but they will lose their job for ever, would you have accepted that?

Spencer:- Don't trust anybody that's my motto.

Peter:- But if they were going to lose their jobs they'd try harder so...

So you think your competition would have helped them?

Spencer:- Yes. If they brought money to buy Mars bars, they'd probably have money left over and they would take the money and buy something from their shop.

Darrel:- We would have made a lot more money if we had have done that.

Paul:- And if we had have done it, they (they kitchen staff) would have realised what they were doing wrong and they would have brought the same things in and different things. So they would make more profit and we would lose out.

So you think you could have helped them but you were denied that opportunity?

Yes

Stewart:- I think that if we had of been able to sell the sweets more pupils around the school would have got to know about City and Guilds and that but not many pupils bought these (the stationary) it was more the teachers that bought them at the fete. If we had sold the sweets the pupils would have found out about it.

Was there anything else Mrs.C. helped you with?

Nicol:- She decided to put the money in the bank and spend it when she said, and we wanted to put it under our name. You had to have her sign it before you could take the money out. We didn't know exactly how much was in there.

Paul:- We wanted to share the profits out between us all, but Miss didn't want to, she just wanted to put it in the bank and leave it there.

What has happened to the money now?

Paul:- Its in the bank

Peter:- She said that the money in the bank was going to go towards the course and buy things for the course. As part of the course we are going to the Isle of Wight and I think the money should be spent paying for that rather than us paying again.

Was the question of what was going to happen to the money not discussed at the beginning

Kate:- We said that if we made a profit we were going to paint the room and make it look a bit better.

Peter:- That was her decision again wasn't it?

Spencer:- Yes she decided on the colour. We wanted way out vibrant colours and she decided on peach.

Although it was discussed at the beginning, what you wanted didn't come through? What would you have wanted to do with the money?

X. We all put something in we should all get something out.

If she had come up with the idea that some of the money could have gone to a charity and some towards your trip, would you have gone for that?

All:- Yes.

Can I go back to the banking business, someone mentioned that you had to go to see the bank. What was this all about?

Spencer:- Well me and Stu., when we got the money we had to...

Where did you get the money from?

Peter:- Well from all this, the loans and the mini enterprise and that.

You got £25 from mini-enterprise?

Peter: Yes and we bought all the gear from that and sold it and the profit went into the bank. So we ended up going to the bank all the time.

How much did you actually take out as a loan from the bank?

Paul:- The bank gave us the £40 to start our business with.

Peter:- Well we thought that it was a loan at first and when we rang them they said that they had given us the money.

So you had this £40 which you thought was a loan but was infact a gift, did you actually borrow any more money?

All:- No

What happened to the £40? Is it still there?

Paul:- No we used that to buy our stock to start off with.

So how much do do have in the bank now?

Stewart:- About £60.

So you've still got the £40 you started with plus 20 something £'s?

All:- Yes.

Paul:- It was more, but we have taken some out to pay for the paint and all that.

Do you know exactly how much profit you have made?

Antony:- We did. Its about £23

Paul:- Its more than that. We did actually work it out didn't we?

So when you were actually running your company did any of you actually keep any books?

Peter:- Yes, I did.

Can you tell us how much money you made?

Kate:- We think that its about £90

So even if you paid interest on the £40 you still would have made a lot of money in 2 months? Not bad, you should have kept at it.

Spencer:- That's what we wanted to do, but Miss said that wasn't what we had to do just selling goods. We wanted to go on selling the goods through the window, but she said no you've got to get on with your project.

Did you put the idea that you could go on doing this in your own time to her?

Paul:- We did it at breaks and at certain times at dinner time.

Spencer:- By the time we started to get people to come to our window (their shop counter) it all stopped. I thought that it was a bit dippy really, because it wasn't that it was

interfering with any other school project. We were doing it in our spare time and we were making profits which would have helped towards our trip to the Isle of Wight.

How long would you have like it to go on for?

Spencer:- All the time until we leave. As long as we were making a profit it could go on for ever.

Going back to the role of Mrs. C in your mini-enterprise, was this the way she normally organised the lesson you have with her?

Spencer:- I had for history a few times and she was a bit overpowering, but I think she was excited by the City and Guilds course we were doing... she was excited. She was pleased to see the bit and pieces we had in the paper.

Were you excited by it?

Paul:- Oh yes...

Can I ask you about some of the problems then. It sounds as though the company started up but there were problems. No company has a start up with no problems at all. Can we go back to the beginning and can you think of the problems you had?

Stuart:- I think the first problem we had was electing a board. We had a manager, I was elected the manager.

Spencer:- He couldn't take the responsibilities.

So there were responsibilities?

Stuart:- Yes. Then there was a secretary who was Vicky. Nathan was the finance manager. And I think it was Paul who was the sales manager. Spencer was the production manager. Darrel was the marketing manager. Hadley was the caretaker but was promoted to the vice managing director, a meteoric leap. Towards the end of the mini-enterprise Nathan and Nichol worked together on the finances.

So did you come to elect this board?

Nichol:- We proposed and seconded people and had a vote on it.

How did you come to choose that method?

Spencer:- We didn't it, Mrs C. did.

Do you think that it was a good way?

Paul:- It was alright.

Stewart:- I think it is probably the way they would do it in the outside world.

Left to your own devices, how would you have done it?

Spencer:- I personally would have done it the same way actually.

Paul:- All people in the group were choosing Stewart as the manager, because they trust him. But Hadley, we did trust him a bit but ...(laughter)

What about the money problems? No one seems to know how much profit you made exactly, so was keeping accounts a problem?

x:- We did know but it was quite a long time ago.

Did anyone help you with it?

Kate:- No I don't think so.

So that was something you had to do on your own?

Paul:- We did get some help from the bank 'cause they sent some guy, a manager to talk to us and help us with keeping the books and that. He really just talked to us he didn't do any of the working out or anything.

So you still didn't know much when he left?

Paul:- We did work out something because three of us went into a little room with all the receipts and we worked out much money we were meant to have and then worked how much cash we actually had. So we did work out exactly what we did have in the end.

Spencer:- Although we knew what we wanted to do, Mrs. C said may be jewellery, may be stationary we could decide ... tape change...

You didn't like the decisions being taken from you but how would you have done these things if Mrs. C hadn't prompted you by saying what about this, or this, how would you have liked the working relationship to develop?

Kate:- When we were doing the isle of wight project we told here we wanted to do it all, so she said all right, and it took us about a week to get things done.

Yes but would it have taken a week the next time?

Spencer:- You don't know until you get in that situation really. You can't really look into the future. We didn't know.

The products. If you had been left to decide, would you have

come up with the same products?

Peter:- We were going to sell just pens at first, and things people would need. But she thought ...

Spencer:- We were going to sell jewellery because Kate does it in her spare time and she knows how to do it and that.

This would be using skills you had in the group?

Spencer:- Yes.

Any other problems?

Darrel:- The main problem was trying to find somewhere to sell our goods.

Tell me, who made that decision?

Darrel:- Mrs. C.

So where would you liked to have sold your products?

Paul:- At Kingsmead, but we sold quite a few of the things to teachers, but because we didn't keep an eye on the finances as well as we could, the products were often sold at a discount.

Peter:- She wouldn't let us count money, she would put it in the bank or put it in a drawer, or she would have it at home, we didn't see it at all.

Spencer:- We made our profits and we were told to put it in a drawer, not to touch it or nothing. She didn't even bring it to the lesson to tell us how much we had and that.

Paul:- If we asked about it, she'd change the subject and that... At one time she wanted me to close the account because they were charging us at the bank ... what was it.

Darrel:- £1 was it?

Spencer:- They said they weren't going to charge us and they did, this £1, and she got in a mood.

How did you feel about that?

Peter:- The money wasn't doing anything in the bank we might as well spend it on something.

Is it in a deposit account?

Darrel:- Yes. We all wanted to put it into a building society at first but but Mrs. C. said no, because she knew someone from the



bank, so we put it in there.

I think the reason for was purely because that was the way you got your £40.

Paul:- She was getting really ratty about the £1 charge but they gave us £40. So it wasn't really worth getting that bothered. We'll give them a £1 if hats what they want.

Its hardly worth giving you £40 though if they are going to take it back in 40 lumps though is it? When you were allocating roles in the company, did you gender come into the process?

All:- No

Darrel:- Yes it did. Well for the secretary, but that's about the only one.

Spencer:- Its all changed now because I am secretary to the Isle of Wight course.

Did you think that the company secretary's job was all to do with typing?

All:- No.

Stewart:- I think that we chose Vicky because she had the neatest writing out of the lot of us.

Can I ask you very briefly what you would like to do when you leave school.

Stewart:- I'd like to be an electrician or something like that.

Nathan:- I'd like to do something with cameras

What do you mean video cameras?

Nathan:- Yes

Paul:- I'd like to go to the tech. to take one of their catering and management courses and then hopefully start by going around touring places and doing different types of catering.

Kate:- I want to do something with children.

Darrel:- I want to be a pro golfer.

Spencer:- I have no idea, but I'll be a millionaire when I grow up but I don't know how yet.

X:- I think I will go to college to take City and Guilds again because I want to get a higher grade as I think that helps,

perhaps go to university eventually.

Vicky:- I'm going to join the police.

Peter:- I want to do a YTS course in mechanics or cars or something.

Y:- I thought I'd sit around and rob a bank.

Has this mini-enterprise given you the thought that you might actually like to work for yourself?

X:- Yes, but and can't think how this has helped.

Spencer:- If I did start my own business and its like this I don't think this would help me that much. I know we've got some good experience from it, but we really haven't done enough ourselves. If we started from scratch, like supplying our own name, completely from scratch with no one helping us at all then it might have helped.

Well at least it has helped you know what you have to do.

Spencer:- Yes, it has helped us work with the public.

How did your parent react to you taking part in the mini-enterprise ?

Stewart:- I think that my mum and dad thought that it was quite good. It would give me a bit more insight into what I would have to do when I left school.

Scott:- My mum thought that it was quite good because it teaches you to mix with the public.

Nick:- They thought that it was quite good, because we were all working together.

X:- I didn't talk about it much with them really, so I don't really know.

Nichol:- They thought that it was good that I mix with other people.

Kate:- I didn't talk about it with them really.

Darrel:- My mum felt quite chuft about it.

Spencer:- Well my mum didn't know much about it and she was a bit weary really, she knew that it was part of the course. But she thought that it was quite good once she got to know about it, although she wasn't too keen on the teacher.

Vicky:- My mum and dad thought that it was good.

Z:- I didn't tell my parents about it, but they were quite pleased when I was in the paper.

That all I wanted to ask really, unless anyone has something they want to say about their mini enterprise?

Spencer:- Don't tell anyone what to do, let them get on with it they will learn better.

So you think that you would learn better if you were making all the decisions?

Peter:- If I had the money in the bank I would start my own business.

## **APPENDIX 7(b)**

### **Example Transcripts of the Semi-Structured Interviews Conducted with Teachers of Mini-Enterprise Groups**

## **Comprehensive School - Organiser of a Mini-Enterprise**

**Can you tell me what we are looking at on the video?**

Well this is the first time they were in their groups. We had done all the preparatory work and they are deciding what product, or service, they are going to offer. They are deciding what they are going to set up. They have done some work on their strengths and weaknesses. So that is a group of three boys. This is another group of three girls. This is the other group of four girls there. There were actually five groups.

**How many are there in all?**

18 students.

**And how long have they been told they will be doing the mini-enterprise for?**

They started about four weeks ago, so that will be six weeks this term, plus winding up, probably three weeks next term.

**You mentioned that you wanted them to make something but one of the groups went towards providing a service.**

This is the computer software hire service, yes.

**So how long did it take them to get up and running?**

They were a bit slow actually. I think that is the most difficult part actually, thinking what they are going to do. This group we are looking at now were particularly slow to get started, probably because there were so many of them. It was a couple of weeks really before they formulated a reasonable idea really.

**Why are they doing the enterprise project?**

Its part of their business and information studies GCSE. It actually takes up most of this term's work. There is a lead up to it, actually taking part in the project and a support exercise. Then they are assessed on their group contribution. And they have to produce a piece of course work.

**So the main thing is to actually get them working in groups?**

Yes, in groups, and also to pick up some business ideas as well.

**Does your role change in this unit of work from what it would be normally?**

Well yes it has, but the BIS course is very much the teacher as facilitator. But in this activity particularly, you don't have very much to do once they get started, apart from helping if they

need help, and pointing them in the right direction if they are not going the way they should be going.

**Do you allow them to fail?**

Well yes, because there are things that they do wrong as part of their group activity which they don't get on with that's one of the main things. There are arguments within the group so you have to sort those out from time to time. You suggest things they could do better if they did it again, or if they still have time to do it. Or with the computer software hire, I did actually suggest that they made something, and they came up with the idea of a magazine to accompany the software. And with the software hire company, they made a mistake by not selling themselves any shares, so this week they discovered that they were not going to get any profit from their company, because they didn't actually own it. So looking at their authorised capital they hadn't sold all their shares so they were able to sort that one out, by buying them at a later date. So they got out of that one alright. I did point out from a legal point of view, if they didn't have any shares, they didn't have control of their company. They made quite a bit of profit, so now they have done quite well. So I suppose you could say that they had failed in that instance.

**So did they only work in the lesson time or did they do some work outside that time as well.**

We did discuss this before we started because it is up to them to put in as much time as they can as a group. So if they thought they were going to work outside of the lesson time they had to discuss that before they started. So they got what they could get done in the lesson time was done, and it was up to them if they wanted to use lunch times as well. So what they have done outside school, I don't really know. But they did have to come to a decision as to how much time they were prepared to spend doing it.

**Do you think they have used any of the information they have gained from other lessons or BIS in their mini-enterprise? Have you seen any evidence of that in the video or else where?**

From an IT point of view, they definitely have, they have used a spreadsheet for their plans. They have used the word processor. From the point of view of minutes and agendas, yes, they have used that previous knowledge. They have had to plan and layout their work before. What type of company they were going to be. The fact that they were a private limited company, and what that involved. In terms of the registration all the theory behind being a limited company, and how that operated and how companies performed.

**You said that you used the co-operative video. Were there any other outsiders or any other stimulus involved?**

Not so much before they started. We had the group of seven with a stationery wholesaler. He's been in several times, you can see him on the video. He's actually been quite useful because he has talked about the retailing distribution and where he fitted in, and how much money they need to put on their sales from that point of view. They have been to the bank and opened up bank accounts. The bank manager was quite useful again and gave them folders when they opened their accounts and some booklets.

Which bank was that?

Nat West, because we had the forty pounds.

You mentioned just now the selling of shares. How did they get their money, was it all from shares?

Yes. I told them they were only allowed to buy £5 worth themselves, each. They sold the rest to friends or families and they were limited to £2 each.

So how did you get things like the share certificates printed up?

I already had those I just had to chop them up. And when they came to me with their memorandum of association, when they had worked out how much capital they needed then I issued them with the shares at 50p each share.

How much money did they raise?

Between £30 - £40 they wanted. This is the pitfall the computer software company came to grief with, because they didn't want much start up capital. Although they said they wanted £30 in their articles of association but because they didn't want very much to start with that's why they didn't buy many shares for their company, which is where they went wrong.

So what other things are the other companies making?

This group here (on the video tape) which is three girls and one we haven't seen yet because she was absent. They are bands and bows and they are selling those scrunchy hair bands and making those types of thing. Then there is the larger group of seven who are doing the stationery, selling the stationery which they got from the wholesaler. Then the computer software hire. So they rent the rooms from me at lunch time. And the Classic Fragrances which was a mini-enterprise which I was sent through the post! A chemistry teacher obviously had this idea for making perfumes. I actually have that sent to me, so that was one of the ideas I gave them before they started and that particular group latched onto that and said that was what they wanted to do. Whether it was because they didn't have to put too much thought into it because the idea was already there.

Did you have any contact with the parents before hand?

No I didn't.

And you have had no reaction from them?

We have had a parents evening this particular year where the students were selling thing and the parents all seemed very interested. None of them seemed to be worried about it.

Did the companies consist of all boys or all girls, or was there a mixture of both?

I did suggest that they might like to have both sexes in the group but they actually formed themselves into single sex groups. But when two groups amalgamated that's when we got the mixed group.

How did that work? Did they work reasonably well together in the group that came together?

There is probably a bit more friction in that group than there is in any of the others.

What between the boys and the girls?

Just more friction because the group is larger. Although there has been a bit between one of the boys and one of the girls. X is quite a strong personality. He takes control as you can see (on the video)

You mentioned the initial problem with the share capital. Were there any other problems that cropped up that they had to face and try to solve?

It took them a little while to realise that they had to pay for everything. I hired them the room each week in which they were doing it, this included any other facilities. I charged them 25p a week but they didn't see why they should have to pay for things like that. And the group that was doing the hairbands didn't see why they had to pay for the hire of the sewing machines. Once they got the idea of overheads, it wasn't too bad. The fact that I was going to charge them for photocopying was too popular. One group wanted to phone the man who had the idea of the perfumes but he was never there. They always wanted to phone during school time but the man was a teacher and that's why he was never there. So they had to phone him in their own time and sort things out like that. They wanted me to phone him. So I had to say that I wasn't going to phone him do it yourself. They wanted you to do things at first. But after a while they realised that you weren't going to do things and so they sorted things out for themselves.

How did they view what they were doing? Did they see it as part of their education or was it something different to them?



They do see the connection between the two activities. Although you have to be careful because they do seem to think at times that the main purpose is for them to make money. The more money they make they think that that's the object of the exercise. But I did point that out to them, that it wasn't that at the end they ended up with a huge sum of money.

And they actually accepted that?

Yes, yes.

Did you discuss what would happen to the money that they made?

We have discussed it. I have told them that they have to have an AGM with the share holders when they wind up I have told them, well I haven't insisted that when they have paid their share holders back they donate some to charity.

Did you discuss the problem of tax or VAT?

I briefly mentioned VAT, but not in great detail because they don't have to consider that really. Corporation tax I mentioned, because I said that I would charge them corporation tax if they were not going to donate to charity.

Did they think what they were doing was realistic in terms of what goes on in companies?

Well, the one group of boys in particular were very well aware of what would be done in the real world.

What about you? Did you find this kind of teaching different, better, awkward?

No I didn't find it awkward. I think you have to put time constraints on the things they do, otherwise they may waste time. I don't think that you have to do it this way for the rest of the time. You have to get them to listen from time to time. Like going over the work, comparing the exercises with the real life situation. Covering what they would have to do by law. You have to re-enforce that really.

Do you think they were getting better at using the time towards the end? Or was it the other way around, or was there no difference?

The large group don't seem to be handling it quite so well. There are a number of 'floating bodies' that aren't so well used as they might be. I suppose that's because the task they have doesn't involve that many people. The smaller groups are probably better. They haven't got so many specified jobs for each person. We have actually said what their roles are, there is not that much work to do. They seem to think that if that is their job, they think that they haven't got to do anything else

just that.

As a result of doing this, and perhaps business studies, have any of them said that they would want to do this when they leave school? Start their own business I mean.

Once again, the group with the three boys. They have said that this is what they want to do when they leave school.

Do they feel that this has actually helped them prepare for leaving school and starting their own company?

Its been part of their preparation, but a few of the group (the class) also belong to Young Enterprise. Doing business studies has helped them with that and vice versa.

What's that they are doing? (looking at an activity on tape)

That's the magazine I suggested that they might do. This is one of their lunchtime sessions. They charged them to come in and use the computers. I didn't really want them to just stick to that. I wanted them to produce something, and they came up with this magazine. I think they have learnt a lot this particular group. They had to keep some kind of security on the discs. They found it difficult to keep track of them and lost some. They had to employ a security system where they made their own disc and the pupils changed theirs with them.

Do you think as a result of what they have been doing it will give them a better focus for the rest of their work in school or is that just wishful thinking?

It might be. After my observation of the group I had last year, when I got them in January (the term following their mini-enterprise) I found them not so well motivated after they had spent such a long time working as a group. When they came back to do their 'normal' work, they found it difficult to settle down.

So you think it could have a negative effect?

Yes.

That's interesting. Do you think that it's similar to work experience, in that they come back from that a little unsettled?

Yes they do don't they. They just find it difficult to settle down to proper work again.

Do you think that might be a comment about what we call proper work?

Yes. (laughed) I also don't think they think it (school work) will be useful to them when they leave school.

They can waste time doing this (ME) if they are not careful.  
You've got to keep them on top of things.

Do they see that?

Yes.

Was there somebody in charge who would have noticed anyone not working in the companies?

They were very concerned that people within the group did pull their weight. So you (the teacher) had to try not to interfere, just act as an arbiter if required. This group here (points to a group on the video) had a girl who wasn't always here and they (the pupils) would come to me and say X doesn't do this or doesn't do that, its not fair. But they have probably sorted it out quite well themselves.

How did they get their money from school to the bank, or didn't they bother?

I suggested a bank account right at the beginning, especially if they had a lot of cheques to pay in. Now a lot of them have quite a bit of money. So I took them down the first time to open their bank accounts, but it was their responsibility to look after it after that. But there is one group that hasn't bothered with a bank account. It became difficult for them at one point because they wanted me to write them a cheque. They wanted to give me the cash but I said that I wouldn't do that. So then they tried the school and they got it in the end. But I suggested that if they had their own account they wouldn't have the problem the next time. That was the only group that hasn't opened a bank account.

In terms of the lessons you were more of a facilitator than a teacher, but what about the preparation? Was there a lot more work to be done before lessons?

Only from the point of view of doing the necessary lesson preparation leading up to it. But once you have done that it doesn't involve that much work.

So from your point of view, a success?

I think they have handled it very well. They have been very keen.

So it has helped their motivation?

They all said that they had enjoyed it, but they haven't quite finished yet so ... They don't know whether they have any debts, I don't think some of them will have made very much. But its been a good exercise.

What about the nitty gritty of keeping records, presumably that's one of the thing they have done carefully?

Well yes, they have kept good financial records. These will be part of their portfolio, particularly the financial director.

You made the point just now of charging for rooms, but did they understand the concept of overheads?

Yes. They had to look at their flexible variable costs and work out their money so they knew where their break even point was when they started to sell their products to make money ... and hopefully profit.

What about paying themselves wages?

They could have done if they wanted to. But I suggested that they didn't really home in on that idea.

So really are you saying that their profit were real, with the exception that they didn't pay themselves?

Yes. The three boys with the computer software business want to pay them selves wages as well. They tend to be more towards making the money that the other groups. Once they realise that they had to but their shares, they also asked if they could pay themselves as well. But they can't have everything. If they paid themselves wages, they wouldn't have much to pay out as dividend.

So of all the groups, which do you think was the most enterprising?

They all have their pros and cons. The boys with the computer software have learnt quite a lot, they did go wrong in some areas. This particular group with the bows, they have been good, from the point of view that they have made something and sold it. They sort of plodded along, they are probably not going to make too much profit but they worked out their fixed and break even and they know when they will start making profit. Their product is packaged nicely. This group (on video) has been floundering but I think that's because there were too many of them and they have taken their time getting started. I had suggested they make something, and it was thinking about this which wasted the most time. X the financial director doesn't do anything else and there isn't enough finance things to do.

OK thanks

END

## **MIDDLE SCHOOL - Organiser of mini-enterprise**

*Could you start by saying briefly why you started your mini-enterprise?*

About four years ago, I think I decided that it would be good for the school to move into what was new at the time, but something that had been spoken about in the television and the newspapers. I thought that it would be a very good active learning situation. Because the humanities project at the time was entitled, 'How Britain earns it's living', we thought that this would be a very good way of getting that over. The head chatted to the Year Leader of year five about the idea, who was horrified, but after several meetings we decided to had a go. We happened to have at the time two or three new teachers, and my self in the CDT area, all women, and we thought that it would be quite fun to do. So we had lots of meetings after school and read what we could find about it, and came up with how we would organise it for the first time. Since then of course it changes every year, we add bits and take bits away. But the school is very child centred and we do think these active learning situations are worth while.

*With the National Curriculum now talking about elements of economic awareness, how do you think the ideas fit in?*

Yes, it fits in beautifully, we don't know how (the county) are going to organise the assessment of CDT but it looks as though the activity would fall in very neatly into the existing attainment targets, as I see them in the National Curriculum document.

*And do you find that the children have a better understanding after the activity than they did before?*

That's difficult to know, we hope they do. But a lot of them do have a great deal of knowledge and an awareness of what is going on. We do do an evaluation sheet which comes along afterwards, which does show that they have learnt something. Not necessarily about economic things, because the main reason is more of a social project, in that they are learning how to cooperate, how to overcome boredom, how to try and organise their own day, how to be helpful and kind to people, and overcome difficulties. And these we are very aware that they learn. Yet, many of them do understand a great deal about economics and the principles behind it in the end, but there are still a lot who don't. Hopefully the upper school will pick this up in a few years time.

*In terms of it being an active learning situation, is it the only one the students would encounter, or is it one of many?*

It is one of many but it is the one that's most child

organised I supposed. They are responsible for their own learning. We set the ball rolling and set them off in the right direction and then we try to keep our distance and not interfere unless they really need us. There are others, like the games situation and the world feast day, lot of those sorts of things dotted about the place in humanities.

*I remember when you looked at the video you mentioned that you were alarmed at how many times your voice carried over what was going on. Were you actually surprised when you saw the video at just how much you were involved, or was it just that you were being a bit sensitive about that?*

I think this was at the end of the day when it was packing up time, I don't think I interfered too much during the day, but being a CDT teacher, and as the mini-enterprise companies were largely based on things that the pupils made, there were many situations where the pupils needed my help. They come up with a lovely idea, which in theory they can make, and then they have technical problems so they do come to me and although I do try to say get on with it yourself, I find I have to come back and say, what about trying this or that, or have you considered this. But in the video, well you saw it, it was me saying that belongs there and this belongs somewhere else. Look at the mess in the sink and so on. So yes, tidying up at the end of the day children are not very good at. I know they have been organising themselves all day, they get very tired, they really do get tired! And they get lazy and sleepy and they still have the view at this age, well at any age, that I personally did not put that piece of paper on the floor, so its not really my responsibility to pick that piece up, so unless they know that they made a certain piece of mess they are always reluctant to deal with it. I don't know what the answer is, because I would like to stand right back and say nothing, and say well its ten past three, inspection time, and let them face that, perhaps they would get better.

*What do your colleagues think about this active learning opportunity?*

Quite supportive. I think people who are doing it for the first time are a bit worried, a bit anxious. One colleague found it difficult to hold back. It was difficult for him to stand back and not be involved, he's such a kind person and he was very anxious to help. So if he found a group who didn't have some materials they needed, he would try and find some, or get some himself, or say ... just a minute I know where there are some, and pop out and get something from the cupboard. Now he is much better, and doesn't do that.

*Do you think that the active learning the pupils have done in this project will help them take on active learning in other projects, help them with their confidence etc.?*

I think it's difficult to tell, we like to think that it will help them. After a mini-enterprise we go back to a normal timetable. With various activities, the year group had five weeks off a normal timetable. After that, they slipped into a normal timetable really easily and they seemed to be much better than before when we went off timetable. They have been delightful, well, they were a really good year group before, but now they seem ... more responsible, more friendly with each other. There has been a very noticeable difference this year.

*Do you think that they would prefer to work in that way all the time, or some of each type of teaching and learning?*

In the evaluation where we did ask at the end, three pointers that would make mini-enterprise better next year and a great many of them said that they would like a longer period of time doing it. I think that its a super project but the children get tired. They get tired of organising themselves and they get tired of thinking, what shall I do next. Many of them, the real high flyers, are alright, but the average and some of the lower ability do really not know what to do for themselves if it was in all subjects all the time.

*You say they were tired. What was the parents reaction to the project? Did they notice anything different?*

Oh yes, I had a mother who came in last night who said that her child came in cross, and kicked the cat, saying she hated the project, that it was awful. But they're in the next day and they have to go and fight the battle yet again and at the end of the project all the parents say that they think it's fantastic and it's been so good for their children. I have not, in all the years we have been doing it, had any adverse comments from parents. They are aware that the children are tired and sometimes over anxious. Sometimes they do take the responsibility to heart. Perhaps if they are in a company and things are not going quite right, they go home and do a bit more than they ought to, more than they would do normally, because they feel the responsibility is on their shoulders. Others take as an opportunity to say, well its not real work so we don't have to do anything. But again we have a bit of a control over that because they have to keep a diary and they are supposed to spend 40 minutes a night on their diary. The consultants look at their diary each day and if it is not up to standard, they are required to go into the quiet room, its called the 'sin bin' these days, to catch up. But you have to be careful that the children don't do their homework

purposely so that they can spend a quiet hour in the quiet room catching up.

*How do the parents react to that?*

The parents are allright. One of the parents did react this year. She came to school and said, you ought to see how much research my daughter did trying to find out information about her project. This is a girl who is generally very good, mum thought she had too much to do. We didn't think she did but she had chosen to work on something with another girl and consequently did end up with a lot to do.

*Going back to the companies. Every one of them made something. Now in a recent edition of the Time Educational Supplement, there was an article which was very dismissive of mini-enterprise suggesting that they only made second rate products which parents and friends were expected to buy. What was your impression?*

Well, I quite like the idea of having a mini-enterprise which provides a service, but it would be just too difficult to monitor the whole year group. The smallest year group is 100, the largest 150 and that is too large for them to be out in different parts of the school, or even outside the school providing a service to the public. We just couldn't contain ... we would run into all sorts of insurance problems if they were washing cars or helping in a play school. They did a project where they helped a play school in their third year, but we thought that it would be best if we kept this having ... a financial background if you like, because it links in with their humanities work. Funny enough, we did try this year, not to over emphasise the profit element. Some of the companies sold their products and paid their loan back and could have sat back and said, well we've done our bit we've sold our products paid our loan back, we can just sit back and ride out the last three days. They needn't have used more money to buy more materials in the last three days. We did say that we would like to have some awards, we would like to have some money for a celebration, some money for a disco and we would like to give some money to charity, so part of the enterprise idea is making a profit. To see have they would use some money and make it grow. Rather like the parable of the talents. They were given their money and they were encouraged not to bury it, but to try and make it grow.

*The use by certain politicians of the word enterprise has, in some peoples' eyes, given enterprise a bad name. Was there any reaction to the concept of encouraging pupils to make profit? Some of the groups borrowed money from a bank, and in the case of one group, they made a huge profit. How do you feel about this?*



Well, I think in their adult lives they will need to borrow money and I think you have to be careful you don't encourage them to get themselves into an H.P. syndrome. But I think it is a fact of life that a business can't go very far without having to borrow money. Then I think it's a case of ensuring that they understand that borrowing money is a responsibility and because we charge them interest, they understand that borrowing money is expensive. The amount of interest we charged was quite high and it persuaded them to pay the money back quickly. I think a fact of life is that not everybody can be in a job that can generate money, there are a great many jobs that are a service, and various jobs have to be financed from other people's profits and I think that is the bottom line really. Not that you have to make individuals wealthy, but you have to support the whole community. There has to be money from one venture that can support another where there is not money to support it. I don't know if that goes against what other people think, but having run our own business (with her husband) and having nearly gone bankrupt, it occurs to me that people who do not have to make a profit do not understand how the world runs. It is absolutely necessary to make a profit, not to make yourself wealthy necessarily, but to keep the wheel of business turning.

*I've been here several times now whilst the children have been doing this activity and they always seem to be well motivated. Do you think that this activity motivates them better, than say their normal activities, even though they are active in those lessons as well?*

They are, they are generally active in my lessons which is CDT, but they are also active in humanities and PSE. French is active as well. So to many of them, this is just another adventure. There are a few who feel that something is not worth doing unless you get paid for it. I feel they enjoy enterprise, except those children who have organisational problems, who have friendship problems. People who are handicapped by their personalities. Those are the ones who we have to help quietly and encourage more than perhaps the majority of children.

*Do they pull in experience from lessons outside their mini-enterprise?*

I think they do tend to see things in boxes. Sometimes when they are struggling with something, I will say, don't you remember when you did this in ... and they say, oh yes. I don't think they easily apply their previous knowledge from other lessons.

One thing I have seen this year which has worried me a bit, is some companies taking ideas from last years mini-enterprise and trying to translate them exactly as they

were, without realising that some of those ideas are not very good. They look at the personalities from last year and they say, they were great we'll do what they did, without looking at the product. I do think they try to apply lessons but I don't think they have much success.

*You say that one of your objectives is to develop social skills. Do you find that the pupils cross friendship groups or do they tend to stay in their groups?*

A mixture. There are some who stay together and there are others who go across classes, perhaps with people they know outside of school. There is a big variety, I should say about 60% stay in friendship groups. Interestingly, this year there are a number of groups where there are four friends and they have pulled in another pupils into the group.

*Do they work better when there are friends together or when they are just pupils from different classes?*

I don't think there is a general rule. Where there is ability they seem to be productive but if you have one or two who gossip or who are disruptive, then there tends to be problems. Our biggest problem last year was a group of 7, not all friends but say a 2 and a 3 and so on. That was really hard. Two brilliant girls who suffered because of 5 pig headed boys.

*I was going to ask you about the gender mix. Was that a problem or was it just a feature of the way in which the groups generally came together?*

It seems to be something that happens naturally, you tend to see girls sitting together and you see boys sitting together. When you go into assemble, you don't say boy line up on one side and girls on another, when you give them a choice of where they may sit, the boys sit together and the girls sit together. There are, this year the signs of boy friends sitting with certain girls.

*And do you perceive any difference in performance of companies by gender?*

Yes, in that the girls involved tend to be neater and attempt to do things properly, boys on the other hand, tend to be a little more 'slaphappy', particularly with presentation. The girls' work generally tends to be neater. The girls pay attention to quality control. The boys often come up with a bright idea, but when they make the product, it tends to be of poor quality and we have to go back and establish someone to look after quality control. The girls illustrate their work beautifully, with the boys, its a quick scribble and that it. To a certain extent, that is

reflected in their generally school work anyway, I don't think there is anything special in this respect about mini-enterprise. The girls do take it a little more seriously, they listen a bit more in their meetings, they tend to have their chairman and their minutes written out properly, not all of them but most. With the boys, its a; anything to report today chaps, lets get on with it. I suppose in that situation, it's play acting to please the system.

*That was well illustrated in the video.*

Yes, boys are far more casual about it.

*Do you think that this experience will have any influence on the future subjects the pupils will focus on or possibly future careers?*

I think that they are a bit young. I think some of them think that they might build on the experiences they have had later. In the evaluations we ask what role they have played and if they would like to hold a similar role in future. Those who say they have been managing directors say, yes I'd love to be managing director. On another occasions, you have a child who has been a managing director and who says they hated the role and certainly would never want to be a managing director. Some of the bright pupils see through the question and give a perceptive view of what they would like to do in the future, others simply take it at face value and give you a direct answer about their mini-enterprise experience.

*I realise that you have a lot of expertise in school now but did you use any adults from outside?*

We have used AOT's in the past, but this year we sent a letter explaining about what we wanted to do. We asked if any parents who had experience of industry or commerce and who could spare the time to come in to get in touch. We didn't have any response at all except for one mother. In the past we have had a bank manager and others who helped. I would like to have more. I don't know that its a good idea to have people from outside who come in and talk to the children, we have toyed with the idea of taking them out to see people in industry, but its such a mammoth task, plus the cost.

*What do you think will happen in future years? Do you think the mini-enterprise will go on?*

I think it will change a bit. We'll discuss what went on and what was good and possible changes. But I think it can cover a great deal throughout the curriculum. I think we will modify it according to the staff involved.

*Does the school itself get anything out of the mini-enterprise? You mentioned the active learning going on but is there anything else?*

We have had some publicity, we are keen to show that this is a good school. There are some who are reluctant to promote the school in this way, but the bottom line is that we need to do what others do. But despite the reluctance there are those who feel this is positive and helps the children. We have had some letters from parents saying how much their children enjoyed the project and how impressed they were with it.

*You didn't have any parents saying that this was just an excuse for teachers to stand back and do nothing?*

No, there is a great deal of organising that needs to be done before the project can go ahead and I think the parents realise this. We are always there to advise and we have to continually monitor the paperwork the children produce.

*If you had a direct line to the CEO and could ask for additional resources for this project in future what would you ask for?*

I'd ask for transport to get the children out to see various industries. I'd like a register of firms who would be able to allow visits and would welcome the children to see what they did. Perhaps some teachers to help us organise various projects, perhaps secretarial help to enable us to organise visits. I think it would be lovely for the children to have the experience of looking around a well organised factory and not just the local ones because they happen to be near the school.

*Why not well organised small companies?*

Well, a small company cannot afford to take on people with certain disabilities, they cannot afford to take on people with bad attendance records. As a small business you just can't afford to, as a small business you just have to fight for survival. If there is someone who cannot keep up because of some handicap, or a worker who has a negative or stubborn attitude, a small company cannot absorb such a person, they would just go under. And I do feel that some politicians have an unrealistic view of what life in a small business is like.

*Thank you*

end

## **MINI-ENTERPRISE ORGANISER - 6th FORM COLLEGE**

**First, can you tell me why you chose to become involved in a mini-enterprise?**

Originally, the motive was that I was teaching CEE English (that was), 'O' level language (that was), and in order to get students to write, or to talk, or construct assignments. But not like, what did you do last Christmas?, type assignments which they had no interest in. The consequence was that you began with poorly motivated students and unless they're intelligent enough and resourceful enough to self motivate, you really do achieve very little. My main reason for being involved in an enterprise project was to achieve the same objectives I have always had as an English teacher, but hopefully to go further and achieve others, through the students being involved in something which motivates them.

**You say there were other objectives, what were they?**

They were various, but at that time and I'm talking six or seven years ago, there was very little that the students did that was collaborative, and yet nearly everything they do in working environment will be collaborative. We were clearly failing a number of students who came through our college, because we weren't preparing them for a working environment and were simply allowing them to work in a friendly educational context. This particular enterprise project, the Multi-snack project, is superb for preparing students for the work environment. The team building aspect in particular.

**In many ways they are involved in a very specialised bit of the work environment, retailing. Did you see any disadvantages to that, or was the Multi-snack experience just a means to an end?**

I think you have to put it in the context of the complete course they are doing. If a student enrolls to do a CPVE course, Multi-snack will be just one of three enterprise projects they will do, and certainly we have enterprises which involve them from the instigation of the idea, through to the marketing and sales of the product.

**What Young Enterprise?**

No, not YE. The course is flexible enough to allow us to build in other enterprise projects. For example, you know the art and design students use those large folders made out of corrugated plastic? We had an enterprise last year where they made 100s of those things, that undercut, with quality production, shop prices by more

that 50%, and were therefore supplying the whole college. And we could have had outlets in other colleges if we had wanted. Now that idea came from them. They did the market research, they did the lot. Now the Multi snack enterprise is a different thing, it's much more limited, but within it's limits, it has a more attainable objective. It's a given project, they don't decide whether they do it or not.

**Were there differences in the way the students approached these two types of enterprise and other subjects?**

That's quite a difficult one for me. If you take that I have been taking recently. I take 'A' level communication studies, and the answer to your question in relation to that is, no it isn't. 'A' level communication studies requires, if anything, a teaching style which is more of a facilitator than any of this enterprise work. Largely because you have a situation where how ever many students you have in your group, there is still a number of different things that they are doing. But it is a new 'A' level, and for example it meets all the four criteria except modern foreign language, which you could think of, if a teacher had the capacity to do it, integrated into it. You could make 'A' level communication studies a core curriculum if you chose to. 'A' level English literature, I think the differences in teaching methodology are less extreme than you would imagine now, in that we are dealing with a 50% coursework course with 25% based on unseen passages. Never the less, almost all the teaching time, we are around a desk with the students, and you are engaging with the students in a relatively informal, except that the wrong word, way. But I don't think that in terms of the relationship between teacher and student, I mean the content is different, but I don't think the relationship is. And of course I don't teach any GCSE.

**Were there opportunities for youngsters to utilise the experiences they already had?**

I think that is a question that staff at colleges are less able to answer properly than they ought to be able to. If I was being really honest, I'd have to say I don't know, because I'd have to say I don't know what those experiences were. I would have thought that this particular project, well I know that with different groups of students, this is the third year I have done it, and I do know that the group we had through this year were ... appeared more happy working with other people as a team, than the group did that began it. (3 years before) But the kind of issues you are focusing on there, to do with progression and transition pre and post 16, the honest answer is, that there isn't much

cross-fertilisation of teaching styles etc. going on. I think I know more about what is going on in the schools than the majority of my colleagues, by virtue of the job that I have been doing. But I still don't know enough to answer your question with any degree of certainty.

At least two of the member of the mini-enterprise we saw on the video, to my certain knowledge, had a similar experience last year. Were you able to notice that in your work with them?

One thing that needs to be pointed out about that group we took on this year, is that they didn't achieve a great deal in terms of qualification prior to entry. X for example was an extraordinary complicated young man to deal with. He reacted erratically to almost everything through the year. He had good days and bad days. He had a long period of time where he cut himself off from the rest of the group and didn't participate. He couldn't concentrate at a board meeting for more than a very, very short period of time, and yet from time to time, you would find him in college, hours after college had ended tidying up the shelves in the vending machine. We were very worried about putting him out on a work experience placement. We offered him a lot of support, made visits to the company, and he was magnificent. Thinking particularly of the group we had doing their project this year, he was one amongst many pretty complicated people who needed a lot of help. I mean, this isn't a main stream group of student who are typical of the college at all, and I think every one of them despite their past experiences and the abilities that they had developed through school work, they all needed the opportunity to be given this space. I think the other advantage to the way we are running this is, that we have managed to expand the constraints of the timetable a little bit so that when they needed time to do something on this project, they always had it. It's integral to the course, and if they could justify taking an hour over doing something with permission, then they have had that time. Now I think they needed this space, they needed this time. Take the first time they take £150 out of the machine and they get a bill for £400 for a stock order. They are dealing with really enormous sums of money. The first time they get the money out of the machine they take it back over here. They say, 'Why don't you come with us?' I always say no, you count it. That's what they need. In the first year we made a profit of £800. Last year we made a loss of £60 and this year we made a profit of £150. I know we have lost money and I'm happy with that, no, that's not true. I can accept that, because I have to be happy because my role wouldn't be that of teacher if I wasn't. I have to be happy to allow them to bring £150 here and count it and trust them to

get it right. One has to accept that this is a group of students one might think twice about letting them do that. So in terms of personal and social skills, social and life skills. I think we as a team of teachers are running the enterprise with that uppermost in our minds.

One of the reasons one might put forward for running a mini-enterprise is that it teaches the students economic awareness. Do you think that was one of the features?

I don't think it was as much a feature this year as it ought to have been. As it was in the best year that we ran this. But there is no conflict in running it with a social and life skills emphasis and running it with an economic awareness emphasis, the two go together, there is no conflict there. I think that my propensity as a teacher is to focus on the social and life skills aspects, maybe, to the exclusion of the economic awareness aspects. When I did it corroboratively with 'Y', we did it better because we complimented each other and what happened with that group was that 'Y' would focus on the economic awareness elements and I would focus on the group work PSE emphasised and it went very well. This year, I mean clearly the economic emphasis hasn't been ignored and quite clearly through a lot of numeracy work they've managed the accounts and attempted to balance the books. But there is more in there than we got out this year, certainly.

How involved were you in the company? Clearly you wanted to be a facilitator, but did you have to get involved directly?

Certainly, yes. To begin with the anecdotes, we had a situation of theft with menaces where a lad, or a group of lads, approached one of the company when they went to fill the machine up. They said, 'If you don't give us that box of drifters, you'll know about it!' And they gave them them, and it took them a fortnight to tell me what had happened and then they only told me because a stock check revealed that they were 48 drifters short. In that kind of situation we obviously talked it through to try and make sense of it, but in the end I had to go and sort them out. So, in that sense I did get involved. In the sense that there is a limit to mistakes you can let them make, I knew what the stock orders were before they sent them in, because there was a chance of £400 being spent and once they had made the commitment there is nothing you can do about it. So I had to get involved to that extent. I attended all the board meetings and our chairperson needed a lot of help in terms of structuring meeting so that people listened to each other. It was quite obvious that the biggest failing that any of these students have is the ability to listen



to anyone else. And 'T' who left early, (on the video), was a typical male student in a group like this. He was quite happy to go any fill the machine up, count the money, go to the bank. But he was most unwilling to sit down and listen to what anybody else had to say. So it's all very well making another student chairperson of the meeting, but that doesn't mean that anyone else is going to listen to that student. I think where I have failed with the group this year is to do with students like 'R', who was always going to be somebody who wasn't going to volunteer to participate in anything. She's the kind of student who hides in groups. And she needed support and she needed me to find a way she could take on a role with some kind of responsibility and I didn't, I couldn't. I didn't give enough thought to it, I didn't realise until the end of the course that she had drifted through. So I do know that there was somebody there who drifted through the whole year who I could have done something for, and didn't. I feel a bit sad about that. I think it is very difficult to combine in an enterprise project the need for them to be an efficient working unit and the need for different member of the group to have different roles and responsibilities. When the students know who is capable of doing the job and doing it well, then as teacher, it is difficult for you to intervene and change things around and put someone in a position who is going to be less good at it.

You said that one of the reasons for doing the enterprise was to help with student motivation. Yet it seemed to me that many of the tasks they were doing were very repetitive. How do you square that?

That's a very interesting one. At the beginning of the year three tran ... followed the same pattern. The first six weeks are marvellous, its very exciting. They've opened there bank account, they've got to get stock orders in, they've got to fill the machine, representatives from Multi-snack are coming in to give them some training in how to do it. There are a lot of things going on. The machine will break down, the change machine will break down. They don't quite know what they are doing so it takes them a long time to do it. So those things by the end of the first six weeks don't become repetitive they are exciting. Board meetings are even exciting during the first part of the course. Its the period between the end of the first term, from Christmas. The first term is too long and the we break it up by putting in a four week work experience, but its still too long. And by Christmas they have had enough of the vending machine ... some of them. Then you're in a position where it does need restocking regularly, daily ideally. Certainly every two of three days. The money need emptying and taking off the premises every Friday,

and its a repetitive job. I think it is possible to keep students motivated, particularly students who have been out on a four week work experience. Particularly with students who are going to be looking for employment immediately upon leaving college. But one of the things that has to happen is teachers have got to find the time to sit down and talk with them and listen. Funnily enough, although the students will complain about how boring some jobs are, and although it's motivation in a different sense to the motivation seen during the first six weeks of the course, it's quite an interesting context to talk about with them. We have problems with people who are hacked in with the .... this year. But I think it's real, that's what matters. Its real money, its real stock and they get a lot of support from Multi-snack as well.

Normally companies make profit, as this one did, what happens to this profit, and who decided what happened to it?

When the first group made £800 we didn't know what was going to happen at that point. They made £800 and that worried us a bit because quite clearly we could just divide the £800 between 8 students. With profit this year, what was said was that on this Multi-snack enterprise they could determine how any profit was spent. And they have. But other enterprise projects that have been run, they have been able to take money away from it. So basically so far as what's in it for them, is that the performance in the company as assessed by their continuous assessment and their profiles. They knew that their successful involvement in this project was important if they were going to achieve a successful grade at the end of the project, and that was important for them. It would be interesting to know if we had let them keep the money whether they would have made more, but we didn't.

You'll never know.

Well, they did make £800 in the first year and it must be possible to make about £1000 or so ...

Obviously, they did meet some adults other than teachers, the bank manager, the rep. from Multi-snack. How did they handle that situation?

The banking bit, not awfully well. They tended to clam up with the bank manager and it was a highly embarrassing session. So communication was minimal, and he had to initiate what ever did happen. With the Multi-snack rep. excellent. I think one of the good things about this is, that Multi-snack would give you a monthly visit if you

wanted it. So the Multi-snack rep. attended the monthly board meetings. And in the past, not this year but in the past, we've had some classic situations. The first rep we had, appeared in a brand new Cavalier estate with a pin striped suite and a filofax, and was about mid. twenty's. He came in in September and attended a few board meetings and he came in before Christmas and he told me before the meeting that he had got the sack. I asked if he would mind telling them. He said he would. They were astounded, largely because of his image and the way he presented himself. That spoke success to them. He told them the honest truth. He went through with them how he had to meet his targets. He told them if he didn't reach his targets he got the sack. He told them they were in a similar position and they learned that having a Cavalier for two months, and being able to dress well may mean nothing. And they learned a hell of a lot from that about reality. What followed was even more interesting. In January when the next rep turned up. And here I run the risk of being sexist myself, the rep. was a really beautiful woman, very young, very glamorous. The lads found it quite hard to handle, and the girls reacted very aggressively towards her. She had much more difficulty establishing a credibility with the group, than her predecessor. Yet when she left from her own volition a year or so later, she had been far more successful than he had, and as a model for the students, she was interesting. Because we get to know the reps. quite well. So having somebody in from outside is valuable and the other companies we have run have all learnt from people who came in from outside. The thing about these groups is, that from one year to the next, you really can't tell what kind of personalities you'll be working with. In the year we made £800 profit, half the group were special needs students. But they were a particular kind of special needs student. They seemed to have a special need to make money! They were people who were highly conscientious and were humble a lot of them. Where as this year, we have had one or two people who didn't want to do any work and have made it difficult for other people to do any work at times.

**In overall terms would you say that the enterprise has been a success?**

On all three occasions its been an enormous success. The conflicts have been wonderful in teaching and learning contexts. It provided an opportunity for a group that campaigned about healthy eating in respect to the products that were being sold in the vending machine. They went all around the college and people had to justify their position related to the vending machine issue. We have had theft. We have had numerous rotas to try and find out why their colleagues weren't pulling

their weight. We have had managers who have been incompetent. We have had managers who have been so competent they have done all the work. For what we are using it for, I think that its a marvellous vehicle because it contains so many things you can do. And also, it's flexible. You can adapt it, chop it and change it, to suite the needs of the kids you are working with. From the teachers' point of view its got the flexibility to do the thing you want to do.

## **APPENDIX 8**

**The correlation between the response given by students in the  
questionnaire compared with their results in the same  
questionnaire given one month later.  
(n = 25)**

sample (n = 25)

QUESTION    CORELATION CO.    SIGNIFICANCE VALUE

A1	.9381	P = .000
A2	.8125	P = .000
A3	.6414	P = .001
A4	.5307	P = .006
A5	.9784	P = .000
A6	.8082	P = .000
A7	.8650	P = .000
A8	.6516	P = .000
A9	.7978	P = .000
A10	.9349	P = .000
A11	1.000	P = .000
A12	.9432	P = .000
A13	1.000	P = .000
A14	.6893	P = .000
A15	.9349	P = .000
A16	.4588	P = .021
A17	.6830	P = .000
A18	.8299	P = .000
A19	.7055	P = .000
A20	.8942	P = .000
A21	.7343	P = .000
A22	.6229	P = .001
A23	.9577	P = .000
A24	.9474	P = .000
A25	.9647	P = .000
A26	.9476	P = .000
A27	.9368	P = .000
A28	.8543	P = .000
A29	.8660	P = .000
A30	.6588	P = .000
A31	.8975	P = .000
A32	.9539	P = .000
A33	.9327	P = .000
A34	.9487	P = .000
A35	.9402	P = .000
A36	.8289	P = .000
A37	.6614	P = .000
A38	.5401	P = .005
A39	.8445	P = .000
A40	.5350	P = .006
A41	.8845	P = .000
A42	.8292	P = .000
A43	.5295	P = .000
A44	.7889	P = .000
A45	.6328	P = .000
A46	1.000	P = .000
A47	.8490	P = .000
A47	.5206	P = .008
A49	.9798	P = .000
A50	.7706	P = .000

QUESTION      CORELATION CO.      SIGNIFICANCE VALUE

B1A	1.000	P = .000
B1B	1.000	P = .000
B1C	1.000	P = .000
B2D	1.000	P = .000
B2A	1.000	P = .000
B2B	1.000	P = .000
B2C	1.000	P = .000
B3D	.8305	P = .000
B3A	1.000	P = .000
B3B	.9693	P = .000
B3C	.9768	P = .000
B3D	.8113	P = .000
B4A	.8997	P = .000
B4B	.9325	P = .000
B4C	1.000	P = .000
B4D	1.000	P = .000
B5A	1.000	P = .000
B5B	1.000	P = .000
B5C	1.000	P = .000
B5D	.9280	P = .000
B6A	.9677	P = .000
B6B	.8107	P = .000
B6C	.9773	P = .000
B6D	.9786	P = .000
B7A	.9702	P = .000
B7B	1.000	P = .000
B7C	1.000	P = .000
B7D	1.000	P = .000
B8A	.9158	P = .000
B8B	.9264	P = .000
B8C	1.000	P = .000
B8D	1.000	P = .000
B9A	.9693	P = .000
B9B	.8281	P = .000
B9C	.8628	P = .000
B9D	.9704	P = .000
B10A	.9580	P = .000
B10B	.9707	P = .000
B10C	.9813	P = .000
B10D	1.000	P = .000

QUESTION      CORELATION CO.      SIGNIFICANCE VALUE

B11A	1.000	P = .000
B11B	1.000	P = .000
B11C	1.000	P = .000
B11D	1.000	P = .000
 B12A	 1.000	 P = .000
B12B	1.000	P = .000
B12C	1.000	P = .000
B12D	1.000	P = .000
 B13A	 1.000	 P = .000
B13B	.9755	P = .000
B13C	.8166	P = .000
B13D	.9801	P = .000
 B14A	 1.000	 P = .000
B14B	1.000	P = .000
B14C	1.000	P = .000
B14D	.9778	P = .000
 B15A	 1.000	 P = .000
B15B	1.000	P = .000
B15C	1.000	P = .000
B15D	1.000	P = .000
 B16A	 1.000	 P = .000
B16B	1.000	P = .000
B16C	1.000	P = .000
B16D	.9849	P = .000
 B17A	 .9635	 P = .000
B17B	1.000	P = .000
B17C	1.000	P = .000
B17D	1.000	P = .000
 B18A	 1.000	 P = .000
B18B	.9798	P = .000
B18C	.9715	P = .000
B18D	1.000	P = .000
 B19A	 .8635	 P = .000
B19B	1.000	P = .000
B19C	1.000	P = .000
B19D	.8754	P = .000
 B20A	 1.000	 P = .000
B20B	1.000	P = .000
B20C	1.000	P = .000
B20D	1.000	P = .000




## **APPENDIX 9**

1. KNOWLEDGE of Accounts & Company Finance/Keeping financial records)
2. Resource Management SKILLS
3. KNOWLEDGE of the banking system
4. Communication SKILLS
5. Self Commitment (ATTITUDE)
6. Self Confidence (ATTITUDE)
7. Self Discipline - Lack of Direct Supervision (ATTITUDE/SKILLS)
8. FLeXibility (ATTITUDE)
9. Honest/Integrity/Loyalty (ATTITUDE/VALUES)
10. KNOWLEDGE of the markets
11. Manufacturing Methods (SKILLS/KNOWLEDGE)
12. Sales Techniques (SKILLS/KNOWLEDGE)
13. Motivation (ATTITUDE/VALUE)
14. Meetings - Participating in Corporate Action(s) (SKILLS/ATTITUDES)
15. Leadership/Negotiating/Delegation/Organisational/Personnel SKILLS
16. Planning (SKILLS)
17. Teamwork vs. Working for, or by, Oneself (ATTITUDE)
18. Initiative (ATTITUDE)
19. Problem Solving SKILLS
20. Decision Making SKILLS
21. Pricing of Goods and Services (KNOWLEDGE)
22. Being able to Cope with Failure (ATTITUDE)
23. Understanding the need for Quality Control (ATTITUDE/KNOWLEDGE)
24. Knowledge of Employees Rights/the Place of Trade Unions (KNOWLEDGE/ATTITUDE)
25. Appreciation of the Needs of Others (ATTITUDE)
26. Developing New Ideas (ATTITUDE/SKILLS/KNOWLEDGE)
27. KNOWLEDGE of Competitive Forces in Enterprise

## APPENDIX 9 (part 2)

### QUESTIONS WHICH FORMULATED CLUSTERS OF RESPONSES

(Number as specified in previous page)

	Questions Matched in Part 'A'	Questions Matched in Part 'B'
1.	32	13, 15, 19.
2.	14	8, 10, 11, 17.
3.		13, 15, 19, 20.
4.	3,7,10,14,16,17,19,29,38,43.	6.
5.	2,5,11,18,30,34,44,46.	
6.	1,12,16,19,24,25,27,31,37,40.	3
7.	11,21,28,30,31,49.	
8.	1,24,26,31,47.	
9.	3,11,46.	1,2.
10.	33,48.	4,8,20.
11.	9,23,44.	9
12.	36.	4,8,14,17,18.
13.	1,2,5,12,18,28,30,36,49.	
14.	7,14,17,22,35,43,38,	5,6.
15.	1,7,17,19,20,21,29,36,39,40.	5,6,12.
16.	9,32,14.	7,20.
17.	1,6,8,10,15,25,35,37,43,	5,6.
18.	18,28,30,44,47.	11.
19.	26,30,34,37,47.	7,11.
20.	10,12,32.	5,6,7.
21.		4,8,9,10,18.
22.	10,12,42.	18.
23.	5,12,41,42.	17.
24.	7,13,38.	1,2,6,12.
25.	1,8,10,13,14,17,20,35,43.	2,5,6,12.
26.	34,35.	7.
27.	36	4,8,10,14,18,20.

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